

INFORMATIONAL PROPOSAL

(For information only, not to be used for bidding)

NEBRASKA DEPARTMENT OF TRANSPORTATION

LETTING DATE: April 11, 2019

CALL ORDER: 400
CONTROL NO. SEQ. NO.: 42866 000

CONTRACT ID: 4866X
PROJECT NO.: NH-81-2(147)

TENTATIVE START DATE: 06/10/2019
LOCATION: US-81, COLUMBUS SOUTH NB

CONTRACT TIME: 45 Working Days

IN COUNTIES: BUTLER, POLK

BIDDER

GROUP 1	GRADING
GROUP 3	CONCRETE PAVEMENT
GROUP 5	SEEDING
GROUP 10	GENERAL ITEMS

SEE SPECIAL PROVISIONS FOR GROUP TIES

NOTES

THE TOTAL AMOUNT OR WORK WHICH WILL BE ACCEPTED IN
THIS LETTING IS LIMITED TO \$_____.

THE NUMBER OF GROUP _____ CONTRACTS WHICH WILL BE
ACCEPTED IN THIS LETTING IS LIMITED TO _____.



Mar 8 2019 DocuSign

NOTICE TO ALL BIDDERS

To report bid rigging activities, call: 1-800-424-9071

The U.S. Department of Transportation (DOT) operates the above toll-free “hotline” Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the “hotline” to report such activities.

The “hotline” is part of the DOT’s continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

LETTING QUESTIONS

Prior to the letting, any questions pertaining to the Special Provisions or the Plans for this project should be submitted to NDOT in a written format through the Bid Express (BidX) website at <https://www.bidx.com/ne/lettings>. Likewise, NDOT will post answers exclusively to the BidX website. All official answers will be identified as “Authorized by NDOT.” **Questions will not be answered verbally.**

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA- 1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally- assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency.

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI.CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
 - a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
 - b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE
ACTION TO ENSURE EQUAL EMPLOYMENT
OPPORTUNITY
(EXECUTIVE ORDER 11246)**

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area are as follows:

GOALS FOR MINORITY PARTICIPATION IN EACH TRADE

Economic Area	Goal %	Economic Area	Goal %
103 Sioux City, IA:		Non-SMSA Counties	5.3
SMSA Counties:		IA Adams, IA Audubon, IA Cass,	
7720 Sioux City, IA-NE	1.9	IA Fremont, IA Harrison, IA Mills,	
IA Woodbury, NE Dakota		IA Montgomery, IA Page, IA Shelby,	
Non-SMSA Counties	1.2	IA Taylor, NE Burt, NE Cass, NE Colfax,	
IA Cherokee, IA Crawford, IA Ida,		NE Dodge, NE Platte, NE Saunders,	
IA Monona, IA O'Brien, IA Plymouth,		NE Washington	
IA Sioux, NE Antelope, NE Cedar,		144 Grand Island, NE:	
NE Cuming, NE Dixon, NE Knox,		Non-SMSA Counties	1.4
NE Madison, NE Pierce, NE Stanton,		NE Adams, NE Arthur, NE Blaine,	
NE Thurston, NE Wayne, SD BonHomme,		NE Boone, NE Boyd, NE Brown,	
SD Clay, SD Union, SD Yankton		NE Buffalo, NE Chase, NE Cherry,	
142 Lincoln, NE:		NE Clay, NE Custer, NE Dawson,	
SMSA Counties:		NE Dundy, NE Franklin, NE Frontier,	
4360 Lincoln, NE	2.8	NE Furnas, NE Garfield, NE Gosper,	
NE Lancaster		NE Grant, NE Greeley, NE Hall, NE	
Non-SMSA Counties	1.9	Hamilton, NE Harlan, NE Hayes,	
NE Butler, NE Fillmore, NE Gage,		NE Hitchcock, NE Holt, NE Hooker,	
NE Jefferson, NE Johnson, NE Nemaha,		NE Howard, NE Kearney, NE Keith,	
NE Otoe, NE Pawnee, NE Polk, NE		NE Keya Paha, NE Lincoln, NE Logan,	
Richardson, NE Saline, NE Seward,		NE Loup, NE McPherson, NE Merrick,	
NE Thayer, NE York		NE Nance, NE Nuckolls, NE Perkins,	
143 Omaha, NE:		NE Phelps, NE Red Willow, NE Rock,	
SMSA Counties:		NE Sherman, NE Thomas, NE Valley,	
5920 Omaha, NE-IA	7.6	NE Webster, NE Wheeler	
IA Pottawattamie, NE Douglas,		145 Scottsbluff, NE:	
NE Sarpy		Non-SMSA Counties	5.3
		NE Banner, NE Box Butte, NE Chey-	
		enne, NE Dawes, NE Deuel, NE	
		Garden, NE Kimball, NE Morrill,	
		NE Scotts Bluff, NE Sheridan, NE	
		Sioux, WY Goshen	

GOALS AND TIMETABLES FOR FEMALE PARTICIPATION IN EACH TRADE

Timetables	Goals (Percent)
From April 1, 1980 until further notice	6.9

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.
4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is by county.

November 3, 1980

**STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY
CONSTRUCTION CONTRACT SPECIFICATIONS
(EXECUTIVE ORDER 11246)**

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
 - c. "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - d. "Minority" includes:
 - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice, which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered Construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.
5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its action. The Contractor shall document these efforts fully and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
 - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
 - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
 - f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
 - g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
 - h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
 - i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
 - j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.

- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
 - l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
 - m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
 - n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 - p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female work force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
 9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).
 10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
 11. The contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
 12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
 13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
 14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the

work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

Supplemental Reporting Requirements

- A. The contractor will keep such records as are necessary to determine compliance with the contractor's equal employment opportunity obligations. The records kept by the contractor will be designed to indicate the number of minority and non-minority group members and women employed in each work classification on the project.
- B. All such records must be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the State Highway agency and the Federal Highway Administration.
- C. The Contractor and each covered subcontractor will submit to the State Highway agency, for the month of July, for the duration of the project, a report (Form PR-1391) "Federal-aid Highway Construction Contractors Annual EEO Report), indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. If on-the-job training is being required by "Standard Federal Equal Employment Opportunity Specifications" the contractor will be required to furnish (Form FHWA 1409) "Federal-aid Highway Construction Contractor's Semi-Annual Training Report".

Equal Employment Opportunity Policy

The contractor will accept as his operating policy the following statement which is designed to further the provision of equal employment opportunity to all persons without regard to their race, color, religion, sex, or national origin, and to promote the full realization of equal employment opportunity through a positive continuing program:

It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, or national origin. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job training.

General Decision Number: NE180032 01/05/2018 NE32

Superseded General Decision Number: NE20170032

State: Nebraska

Construction Type: Highway

Counties: Butler, Fillmore, Gage, Jefferson, Johnson, Nemaha,
Otoe, Pawnee, Polk, Richardson, Saline, Thayer and York
Counties in Nebraska.

HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.35 for calendar year 2018 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.35 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2018. The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/05/2018

* ENGI0571-005 01/01/2013

	Rates	Fringes
OPERATOR: Trencher.....	\$ 20.83	9.60

* SUNE2011-028 08/29/2011

	Rates	Fringes
CARPENTER, Excludes Form Work....	\$ 16.39	
CEMENT MASON/CONCRETE FINISHER...	\$ 16.37	
ELECTRICIAN.....	\$ 20.07	
FORM WORKER.....	\$ 11.18	

IRONWORKER, REINFORCING.....\$ 17.93

LABORER: Common or General
 Butler, Fillmore, Gage,
 Jefferson, Johnson,
 Nemaha, Otoe, Pawnee,
 Polk, Richardson, Thayer &
 York Counties.....\$ 11.76
 Saline County.....\$ 12.12

LABORER: Landscape &
 Irrigation.....\$ 8.30

LABORER: Mason Tender -
 Cement/Concrete.....\$ 9.75

LABORER: Traffic Control -
 Flagger and Cone/Barrel Setter...\$ 9.00

Operating Engineers: (Skid
 Loader).....\$ 12.74

OPERATOR: Asphalt Plant.....\$ 14.09

OPERATOR: Backhoe Loader
 Combo.....\$ 13.58

OPERATOR: Broom/Sweeper.....\$ 11.41

OPERATOR: Bulldozer.....\$ 16.01

OPERATOR: Compactor.....\$ 10.05

OPERATOR: Crane.....\$ 16.17

OPERATOR: Distributor.....\$ 14.37

OPERATOR: Grader/Blade.....\$ 15.77

OPERATOR: Loader.....\$ 16.63

OPERATOR: Mechanic.....\$ 14.64

OPERATOR: Paver (Asphalt,
 Aggregate, and Concrete).....\$ 17.90

OPERATOR: Roller.....\$ 13.02

OPERATOR: Scraper.....\$ 15.23

OPERATOR: Screed.....\$ 12.35

OPERATOR: Tractor.....\$ 12.45

TRUCK DRIVER, Includes Dump
and Tandem Truck
Butler, Fillmore, Gage,
Jefferson, Johnson,
Nemaha, Otoe, Pawnee,
Polk, Richarson, Thayer, &
York Counties.....\$ 13.97
Saline County.....\$ 14.20

TRUCK DRIVER: Lowboy Truck.....\$ 11.97

TRUCK DRIVER: Oil
Distributor Truck.....\$ 13.25

TRUCK DRIVER: Semi-Trailer
Truck.....\$ 14.20

TRUCK DRIVER: Water Truck.....\$ 13.47

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

**NOTICE TO BIDDERS
(1-50-0618)**

Executive Order (EO) 13658 and Executive Order (EO) 13706 do not apply to this contract.

**SPECIAL PROVISIONS
FOR
FEDERAL AID
PROJECT NO. NH-81-2(147)**

GENERAL CONDITIONS

Bids for the work contemplated in this proposal form will be received at the office of the Nebraska Department of Transportation in Room 104 of the Central Office Building at 1500 Highway 2 at Lincoln, Nebraska, on April 11, 2019, until 1:30 P.M.

- a. Bids submitted by mail should be addressed to the Nebraska Department of Transportation, c/o Contract Lettings Section, P.O. Box 94759, Lincoln, NE 68509-4759.
- b. Bids submitted electronically over the internet, shall be submitted using www.bidx.com.

The 2017 Edition of the Standard Specifications for Highway Construction, including all amendments and additions thereto effective at the date of the contract, are made a part of these Special Provisions, through reference.

The Required Contract Provisions, Form FHWA 1273, (Rev. 5-12), and the Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity and Standard Federal Equal Employment Opportunity Construction Contract Specifications dated November 3, 1980, are attached to and are a part of this proposal form. The Standard Labor Classifications and Descriptions for Highway Construction dated September 1, 1996, are made a part of these Special Provisions, through reference.

The General Wage Decision issued under the Davis-Bacon and Related Acts is attached to and is a part of this proposal form.

The attention of bidders is directed to the Required Contract Provisions covering subletting or assigning the contract.

GROUPS 1, 3, 5 & 10 ARE TIED TOGETHER AND BIDDING PROPOSAL FORMS FOR THIS WORK WILL BE ISSUED AND A CONTRACT AWARDED TO A CONTRACTOR WHO IS QUALIFIED FOR CONCRETE PAVEMENT.

**DISADVANTAGED BUSINESS ENTERPRISES
(1-6-1217)**

A. Policy

The Contractor agrees to ensure that Disadvantaged Business Enterprises as defined in 49 CFR Part 26 shall have a “level playing field” and equal opportunity to participate in the performance of contracts financed in whole or in part with Federal funds under this contract. Consequently, the Disadvantaged Business requirements of 49 CFR Part 26 are hereby made a part of and incorporated by this reference into this contract.

B. Disadvantaged Business Enterprises Obligation

The Contractor agrees to ensure that Disadvantaged Business Enterprises as defined in 49 CFR Part 26 have a “level playing field” and equal opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with Federal funds provided under this agreement. In this regard, the Contractor shall take all necessary and reasonable steps in accordance with 49 CFR Part 26 to ensure that Disadvantaged Business Enterprises have a “level playing field” and equal opportunity to compete for and perform contracts. The Contractor shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of FHWA assisted contracts.

Failure of the Contractor to carry out the requirements set forth above shall constitute breach of contract and, after the notification of the FHWA, may result in termination of the agreement or contract by the State or such remedy as the State deems appropriate.

**DISADVANTAGED BUSINESS ENTERPRISES
(Prime Contractor Reporting of DBE Payments)
(1-6-1217)**

This project is funded with Federal Funds and NDOT is required by law to collect DBE payment data from the Contractor. The Prime Contractor shall complete the *DBE Total Paid To Date* portion on the Monthly Employment Report. This report can be found by using the “Contractor Reports” link at www.nebraskatransportation.org/letting/index.htm. All reports must be completed by the Prime Contractor no later than the 10th day of the following month. No estimates/invoices will be processed until this information is received.

**TRAINING SPECIAL PROVISIONS
(1-8-0618)**

This On-the-Job Training (OJT) Program was created by the Federal Highway Administration (FHWA) and the Nebraska Department of Transportation (NDOT) to fulfill the Training Special Provisions requirements of federal-aid construction contracts (23 CFR 230, Appendix B to Subpart A). The purpose of the provision is to address the under-representation of minority and female workers in the construction trades through the assignment of OJT training goals.

Therefore, the training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision.

Accordingly, the Contractor shall make every effort to enroll minority and women trainees (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment.

All Contractors will be responsible for demonstrating the steps that they have taken to recruit minority and women trainees prior to a determination as to whether the Contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not. The Contractor shall provide on-the-job training aimed at developing full journey-level status in the type of trade or job classification involved. The number of training hours under this Training Special Provision will be assigned to each Contractor as set forth below.

1. Under the NDOT Contractor-Specific On-the-Job Training (OJT) Program, OJT hours will be assigned to Contractors and will not be contract or project specific.
 - a. A Contractor who has received an OJT assignment will be allowed to provide training on any NDOT-let project on which the Contractor is working as either a Prime Contractor or a subcontractor. A Contractor will have the flexibility to transfer trainees from one project to another after providing notification of the transfer to NDOT.
 - b. This project does not have a contract-specific training requirement. NDOT has added a training pay item with a nominal 100-hour quantity, that may overrun or underrun, which will be utilized only if the Contractor elects to provide training on this contract.
2. In January each year, NDOT will allocate OJT assignments to Contractors based on the total average dollar amount of all work performed by a Contractor on NDOT-let projects during the previous three (3) calendar years. The total dollar amount will consist of:
 - a. The total dollar amount of the Contractor's prime contracts let by NDOT (both federal and state funded) minus the total dollar amount of the work subcontracted out to others, and
 - b. The total dollar amount of the subcontract work the Contractor performed for others on NDOT-let projects.

The Contractor's average dollar amount for the previous three calendar years will be calculated, and training hours will then be assigned as follows:

Three Year Average**Training Assignments**

Under \$2,500,000	0 hours
\$2,500,000 to 5,000,000	1,000 hours
Over \$5,000,000 to 7,500,000	1,500 hours
Over \$7,500,000 to 10,000,000	2,000 hours
Over \$10,000,000 to 15,000,000	3,000 hours
Over \$15,000,000 to 20,000,000	4,000 hours
Over \$20,000,000 to 25,000,000	5,000 hours
Over \$25,000,000 to 30,000,000	6,000 hours
Over \$30,000,000 to 40,000,000	8,000 hours
Over \$40,000,000 to 50,000,000	10,000 hours
Over \$50,000,000 to 60,000,000	12,000 hours
Over \$60,000,000	15,000 hours

Example: Contractor A, who averaged \$28.66 million, would be assigned 6,000 hours of OJT. Contractor B, who averaged \$10.33 million, would be assigned 3,000 hours of OJT. Contractor C, who averaged \$2.26 million, would not be assigned any OJT hours.

	2011	2012	2013	3 Year Average	2014 OJT Assignment
Contractor A	24.3	33.4	28.3	28.66	6,000 hours
Contractor B	9.3	11.9	9.8	10.33	3,000 hours
Contractor C	2.3	1.4	3.1	2.26	0 hours

3. The OJT hours assigned to a Contractor in January are to be completed during that calendar year (e.g., OJT hours assigned in January of 2014 are to be completed during the period of January 1, 2014 thru December 31, 2014).
 - a. If a Contractor exceeds the number of OJT hours assigned for a calendar year, the Contractor may request to bank up to 30 percent of the excess hours. Banked hours may then be credited toward the Contractor's OJT assignment for the next calendar year.
4. Completion of the annual OJT assignment is the Contractor's responsibility. The Contractor is not allowed to assign any of the OJT hours to any other Contractor. The Contractor must make a Good Faith Effort to enroll an adequate number of trainees and provide the trainees a sufficient number of hours training to achieve the Contractor's annual OJT assignment.
5. While trainees may be assigned to NDOT-let federally or state funded projects, the Contractor should attempt to schedule and assign trainees so that at least 50 percent of a trainee's hours are earned on federally funded projects - unless otherwise approved in advance by NDOT.
6. The Contractor must use an OJT program approved by NDOT and/or the FHWA. An OJT program shall be approved if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and qualify the average trainee for journey-level status in the job classification concerned by the end of the training period.

An approved OJT program must specify the number of hours required for a trainee to achieve journey-level status in each job classification. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training, shall also be considered acceptable provided they are being administered in a manner consistent with the equal employment obligations of federal-aid highway construction contracts.

7. The Contractor shall furnish each trainee a copy of the OJT Program he/she will follow in providing the training. The Contractor shall also provide each trainee with a certification showing the type and length of training satisfactorily completed.
8. The Contractor's Equal Employment Opportunity (EEO) Officer shall be responsible for administering the Contractor's OJT and monitoring the trainees' progress. The EEO Officer shall serve as the point of contact for NDOT regarding OJT information, documentation, and conflict resolution. If necessary, the EEO Officer may designate another individual to assist with the OJT monitoring responsibilities. NDOT must be provided the name and contact information for any such designee.
9. At least seven (7) days prior to commencing training, the Contractor must submit a "Request for Trainee Approval" form to NDOT for each individual to be enrolled as a trainee and a tentative list of the projects to which the trainee will be assigned. Requests for Trainee Approval may be submitted by mail, fax, or email.
10. If the Contractor submits a "Request for Trainee Approval" form to NDOT for an individual who is not a minority or female, or cannot replace departing trainees with minorities or females, the Contractor must also produce sufficient Good Faith Efforts documentation of the type set forth below. NDOT may reject non-minority male trainees for entry into the program if it determines that a Contractor failed to make sufficient Good Faith Efforts to hire minorities or female trainees and/or the Contractor failed to document or submit evidence of its Good Faith Efforts to do so.
11. Any training hours provided to a trainee prior to the Contractor receiving approval from NDOT will not be credited toward the Contractor's annual OJT assignment.
12. When an individual is first enrolled as a trainee, the individual will be approved for the number of hours of OJT required to achieve journey-level status in the classification for which the individual is to receive training. (A Contractor will not be penalized if a trainee does not achieve the full number of hours for which the trainee is approved.)
13. If the Contractor is unable to provide a trainee the full number of training hours required to achieve journey-level status on one project, the trainee should be transferred to other NDOT-let projects on which the Contractor is working.
14. At least one (1) day before all such transfers of trainees are made, the Contractor must provide NDOT in writing the name of the trainee and current project, the project to which the trainee will be transferred, and when the transfer is to take place. Notifications of trainee transfers may be submitted by mail, fax, or email.

15. Any training hours provided to a transferred trainee prior to the Contractor having notified NDOT of the transfer will not be credited toward the Contractor's annual OJT assignment.
16. No individual may be employed as a trainee in any classification in which they have successfully completed training leading to journey-level status or in which they have been employed at journey-level. No individual may be employed as a trainee in any classification with a lower skill level than any classification in which they have successfully completed training leading to journey-level status or in which they have been employed at journey-level (e.g., an individual who has achieved journey-level status as an equipment operator may not be trained as a laborer). The Contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the Contractor's records should document the findings in each case.

An individual may be trained in multiple classifications that require relatively equal skill levels but different skill sets (e.g., an individual who has received training as a milling machine operator may also receive training as a roller operator, or a scraper operator, etc.). Preferably, an individual should have achieved journey-level status in a classification before beginning training in another classification.

The Contractor must request and receive approval from NDOT for an individual to receive training in a classification other than the classification for which the individual was originally approved. Any training hours provided prior to receiving approval from NDOT will not be credited toward the Contractor's annual OJT assignment.

17. Training shall be provided in construction crafts rather than clerk-typist or secretarial-type positions. Training is permissible in positions that are not assigned to a specific project such as office engineers, estimators, timekeepers, shop mechanics, etc., if the selected OJT program includes these classifications. Training in such positions will not be eligible for reimbursement, but will be eligible to be credited toward the Contractor's annual OJT assignment.
18. Some off-site training is permissible as long as the training is an integral part of an approved OJT program and does not comprise a significant part of the overall training (e.g., 16 hours training per trainee per year in areas such as jobsite safety or accident response would be permissible). A copy of a training certificate, agenda, or curriculum must be provided to verify off-site training.
19. The Contractor will be reimbursed \$2.00 per each hour of training provided in accordance with an approved OJT program and the NDOT Training Special Provisions.
20. Contractors shall be allowed to transfer trainees or utilize trainees on other NDOT-let projects which do not contain the Training Special Provisions. NDOT will utilize a Change Order / Supplemental Agreement to incorporate the Training Special Provisions and the appropriate pay item into the contracts of such projects.
21. On all federally funded NDOT-let projects, trainees must be paid at least 60 percent of the appropriate minimum journey-level rate specified in the contract for the first half of the training period, 75 percent for the third quarter, and 90 percent for the last quarter of the training period - or the appropriate rates approved by the U.S. Department of Labor

or the U.S. Department of Transportation in connection with the program in which the trainee is enrolled.

22. In order to document and evaluate a trainee's progress toward journey-level status, the Contractor must provide NDOT at the end of each month a "Special Training Provision Monthly On-The-Job Training Report" listing each trainee, the number of hours trained during the month, and the total number of hours trained as of the date of the report.

NOTE: The monthly reporting requirements may change if/when on-line reporting is implemented by NDOT.

23. If a trainee's employment is terminated for any reason prior to completion of the number of OJT hours for which the individual was approved, the Contractor must make Good Faith Efforts to replace the trainee with another minority or female.
24. Contractors must submit an annual summary report to NDOT by January 15th each year giving an account of all trainee hours provided during the previous year. The report shall show a breakdown of training provided on each project and/or contract.
25. Contractors will have fulfilled their OJT responsibilities if they have provided acceptable training for the number of hours assigned, or have demonstrated that they made a Good Faith Effort to provide the number of OJT hours assigned. Where a Contractor cannot meet his or her annual training hour goal with females and minorities, the Contractor remains responsible for demonstrating the Good Faith Efforts taken in pursuance of the goal. Examples of what actions constitute Good Faith Efforts are set forth below. NDOT will make compliance determinations regarding the Training Special Provisions based upon either attainment of the annual goal or Good Faith Efforts to meet it.
26. Good Faith Efforts are those designed to achieve equal opportunity through positive, aggressive, and continuous results-oriented measures (23 CFR § 230.409(g)(4)). Good Faith Efforts should be taken as trainee-hiring opportunities arise and when minorities and women are under-represented in the Contractor's workforce. NDOT will consider all Contractors' documentation of Good Faith Efforts on a case-by-case basis and take into account the following:
 - a. Availability of minorities, females, and disadvantaged persons for training;
 - b. The potential for effective training;
 - c. Duration of the contract;
 - d. Dollar value of the contract;
 - e. Total normal work force that the average Contractor could be expected to use;
 - f. Geographic location;
 - g. Type of work;
 - h. The need for journey level individuals in the area.

Good Faith Efforts may include, but are not limited to, documentation of efforts to:

- Contact minority and female employees to gain referrals on other minority and female applicants;
- Refer specific minorities and females to training programs and specifically request these trainees by name in the future;
- Upgrade minority and female unskilled workers into the skilled classifications when possible;
- Accept applications at the project site or at the Contractor's home office;
- Review and follow up on previously received applications from minorities and females when hiring opportunities arise;
- Maintain monthly evaluations that monitor efforts made to achieve diversity in the Contractor's workforce in general (i.e., significant numbers of minorities and females employed on a company-wide basis);
- Provide incentives for project management personnel or superintendents when hiring goals are met on a project (i.e., similar to performance bonuses paid when a job is completed in a timely manner and under budget).

27. Liquidated damages will be assessed the Contractor for failure to demonstrate a Good Faith Effort to achieve their full OJT assignment or for failure to demonstrate a Good Faith Effort to achieve their full OJT assignment with minority and women trainees.

Liquidated damages will be assessed at the rate of \$4.00 per hour for the number of OJT hours not achieved or, even if achieved, the number of OJT hours in which the Contractor fails to demonstrate Good Faith Efforts to hire minorities and women. (e.g., if the Contractor was assigned 3,000 hours but only achieved 2,000 hours and did not demonstrate a Good Faith Effort, the liquidated damages would be assessed at 1,000 hours x \$4.00 = \$4,000.00.)

28. NDOT will invoice a Contractor for liquidated damages assessed as a result of the Contractor's failure to demonstrate a Good Faith Effort to achieve the number of OJT hours assigned.

The Contractor's failure to promptly pay any invoice for liquidated damages may result in the Contractor being disqualified to bid work with NDOT for a time period determined by the Director/State Engineer.

29. At the end of the calendar year, if the dollar amount of work the Contractor performed on NDOT-let projects is substantially below the three-year average upon which the Contractor's OJT assignment was based, the Contractor's OJT goal for that year may be adjusted according to the table in Paragraph 2. above.

30. The established per hour unit price for the item "Training" shall be full compensation for all costs incurred, which includes but is not limited to providing the necessary supervision, labor, equipment, tools and material. Any additional costs due to payment

of wages in excess of the minimum rates specified and for the payment of any fringe benefits shall not be paid for directly, but shall be considered subsidiary to the items for which direct payment is made.

AMENDMENT TO CONSTRUCTION TRAINING REPORT REQUIREMENTS

The last sentence under Paragraph C., on Page 5 of the Standard Federal Equal Employment Opportunity Construction Contract Specifications, dated November 3, 1980, is void.

FHWA Form 1409 "Federal-aid Highway Construction Contractor's Semi-Annual Training Report" is not required.

CERTIFICATION FOR FEDERAL-AID CONTRACTS (1-9-1217)

The bidder certifies, by signing and submitting this bid, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The bidder also agrees by submitting his or her bid that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such subrecipients shall certify and disclose accordingly.

STATUS OF UTILITIES

The following information is current as of March 7, 2019.

Aerial and/or underground utility facilities may exist within the limits of this project. The Contractor shall determine to his satisfaction the extent of occupancy of any underground utilities located within the respective construction areas and the extent of conflict with the proposed work under this contract.

At this time, no utilities have been required to relocate their facilities.

Any utility adjustments or interruption of service for the convenience of the Contractor shall be the sole responsibility of the Contractor.

To arrange for utilities to locate and flag their underground facilities, contact Nebraska One Call at 1-800-331-5666 or dial 811.

Any work necessary will be concurrent with construction.

STATUS OF RIGHT OF WAY

The right of way for this project has been acquired and physical possession is held by the State of Nebraska and ready for the Contractor's use, except tracts listed below:

Unacquired Right-of-Way Tracts as follows:

Tract Number	Status of Tract	Hearing Date
None	None	None

Right-of-Way Tracts with Pay Items:

Tract Number	Pay Items
None	None

- No encroachments on the old right of way.
- Acquisition of right of way is not required for this project.

SPECIAL PROSECUTION AND PROGRESS (Phasing)

The plans depict phasing sequences that will be used in the construction of this project. Any deviation from these phasing sequences shall require the written approval of the Engineer.

SPECIAL PROSECUTION AND PROGRESS
(Excavation/Cohesive Fill/Subgrade Construction/
10" Doweled Concrete Pavement)
(Mainline Stations 192+00 to 208+00 except as shown elsewhere)

1. Remove pavement.
2. Excavate 2' of the existing unsuitable subgrade.
3. Place a Class 2 woven or non-woven fabric selected from the Approved Products List over the area of excavation.
4. Place a suitable cohesive fill over the Class II fabric. A suitable cohesive fill shall have a liquid limit less than 50. It shall also have a unified soil classification of CL or a Lean Clay. Soils classified as ML shall not be used. There shall be no vibratory process of the roller(s) during the placement of the first 1' of the fill.
5. Perform Subgrade Preparation.
6. Place the Foundation Course 6".
7. Build 10" Doweled Concrete Pavement.

STATUS OF ENVIRONMENTAL COMMITMENTS

Control No. 42866
 Project No. 81-2(147)
 Project Name: Columbus South NB

404 Permit Required ☒ Yes
☐ No

Comments: Nationwide Permit 3(a)(c), Non-Notifying

**Individual 401 Water Quality
 Certification Required** ☐ Yes
☒ No

**State Title 117 Waters
 (COE Non-Jurisdictional)** ☐ Yes
☒ No

Floodplain Permit Required ☐ Yes
☒ No

Comments: No floodplain permits required.

Historic Clearance ☒ Yes Tier II Approved 8/1/2018
 Supplemental Evaluation Approved 10/22/2018
☐ No

Comments: No historic properties affected.

**Threatened & Endangered Species
 Clearance Required** ☒ Yes FHW – 11/8/2018
 Approved: NGPC – NA
☐ No USFWS – NA

Comments: May Affect, Not Likely to Adversely Affect

Environmental Clearance ☒ Yes ☒ NDOT or ☐ FHWA
 Level 1 CE Approved 1/29/2019
☐ N/A

NPDES/Stormwater Permit No.: NA

Special Provisions: See attached Environmental Commitments

I have compared environmental documentation and project correspondence with the attached environmental commitments and found them to be accurate and complete.

Dillon Dillman DD 2/1/19 T&E PM EC 2/12/19 Jon Barber JB 2/12/19 DU PM JD 2/15/19 Jason Jung JJ 2/19/19 Ron Pbo RP 2/19/19 TRU PM NS 2/19/19
 (Initials) (Date) (Initials) (Date) (Initials) (Date) (Initials) (Date) (Initials) (Date) (Initials) (Date) (Initials) (Date)

ENVIRONMENTAL COMMITMENTS

Control No.: 42866 **Project No.:** 81-2(147)
Project Name: Columbus South NB

Below are the Conservation Conditions that will be required for this project. All conditions and regulations of any permit obtained for this project will be followed by the contractor.

(Responsible Party for the measure is found in parentheses)

This project is permitted under the US Army Corps of Engineers (USACE) Nationwide Permit #3(a)(c).

All **Nationwide Permit General Conditions** and **Nebraska Regional Conditions** will be followed, as applicable. Based on the project scope (NDOT Control No. 42866), the items indicated with checkmarks in the attached Nationwide Permit #3 document appear to be applicable and relevant to the contractor and project manager. (Contractor, District Construction)

Regulated Wetlands and/or Water Resources for this project have been identified and delineated by NDOT. The Contractor shall not drive through, stage, store, waste or stockpile materials and equipment within delineated wetland boundaries (Wetlands – Do Not Disturb) and/or environmentally sensitive areas (Sensitive Area – Do Not Disturb) as shown in the project plan aerial sheets and/or the erosion control plan sheets included in the plan set. (Contractor, District Construction)

Contact Person: Mary Schroer, Highway Environmental Biologist, (402) 479-3969

General Conservation Conditions

- A-1 Changes in Project Scope.** If there is a change in the project scope, the project limits, or environmental commitments, the NDOT Environmental Section must be contacted to evaluate potential impacts prior to implementation. Environmental commitments are not subject to change without prior written approval from the NDOT Environmental Section. (District Construction, Contractor)
- A-2 Conservation Conditions.** Conservation conditions are to be fully implemented within the project boundaries as shown on the plans. (District Construction, Contractor)
- A-3 Early Construction Starts.** Request for early construction starts must be coordinated by the Project Construction Engineer with NDOT Environmental for approval of early start to ensure avoidance of listed species sensitive lifecycle timeframes. Work in these timeframes will could require consultation with the USFWS and NGPC. (District Construction, Contractor)
- A-4 E&T Species.** If federal or state listed species are observed during construction, contact NDOT Environmental. Contact NDOT Environmental for a reference of federal and state listed species. (NDOT Environmental, District Construction, Contractor)
- A-5 Refueling.** Refueling will be conducted outside of those sensitive areas identified on the plans, in the contract, and/or marked in the field. (Contractor)

- A-6 Restricted Activities.** The following project activities shall, to the extent possible, be restricted to between the beginning and ending points (stationing, reference posts, mile markers, and/or section-township-range references) of the project, within the right-of-way designated on the project plans: borrow sites, burn sites, construction debris waste disposal areas, concrete and asphalt plants, haul roads, stockpiling areas, staging areas, and material storage sites.

For activities outside the project limits, the contractor should refer to the Nebraska Game and Park Commission website to determine which species ranges occur within the off-site area. The contractor should plan accordingly for any species surveys that may be required to approve the use of a borrow site or other off-site activities. The contractor should review Chapter 11 of the Matrix (on NDOT's website), where species survey protocol can be found, to estimate the level of effort and timing requirements for surveys.

Any project related activities that occur outside of the project limits must be environmentally cleared/permitted with the Nebraska Game and Parks Commission as well as any other appropriate agencies by the contractor and those clearances/permits submitted to the District Construction Project Manager prior to the start of the above listed project activities. The contractor shall submit information such as an aerial photo showing the proposed activity site, a soil survey map with the location of the site, a plan-sheet or drawing showing the location and dimensions of the activity site, a minimum of 4 different ground photos showing the existing conditions at the proposed activity site, depth to ground water and depth of pit, and the "Platte River depletion status" of the site. The District Construction Project Manager will notify NDOT Environmental which will coordinate with FHWA for acceptance if needed. The contractor must receive notice of acceptance from NDOT, prior to starting the above listed project activities. These project activities cannot adversely affect state and/or federally listed species or designated critical habitat. (NDOT Environmental, District Construction, Contractor)

- A-7 Waste/Debris.** Construction waste/debris will be disposed of in areas or a manner which will not adversely affect state and/or federally listed species and/or designated critical habitat. (Contractor)

- A-8 Post Construction Erosion Control.** Erosion control activities that may take place by NDOT Maintenance or Contractors after construction is complete, but prior to project close-out, shall adhere to any standard conservation conditions for species designated for the project area during construction. (NDOT Maintenance, District Construction, Contractor)

- S-2 Platte River Depletions.** All efforts will be made to design the project and select borrow sites to prevent depletions to the Platte River. If there is any potential to create a depletion, NDOT (during design) and the contractor (for borrow sites) shall follow the current Platte River depletion protocols for coordination, minimization, and mitigation. In general, the following are considered de minimis depletions but may still require agency coordination; a project which: a) creates an annual depletion less than 0.1 acre feet, b) creates a detention basin that detains water for less than 72 hours, c) any diverted water will be returned to its natural basin within 30 days, or d) creates a one-time depletion of less than 10 acre feet. (NDOT Roadway Design, Contractor)

- S-3 Revegetation.** All permanent seeding and plantings (excluding managed landscaped areas) shall use species and composition native to the project vicinity as shown in the Plan for the Roadside Environment. However, within the first 16 feet of the road shoulder and within high erosion prone locations, tall fescue or perennial ryegrass may be used at minimal rates to provide quick groundcover to prevent erosion, unless state or federally listed threatened or endangered plants were identified in the project area during surveys. If listed **plants** were identified during survey, any seed mix

requirements identified during resource agency consultations shall be used for the project. (NDOT Environmental)

- S-4 Sensitive Areas.** Environmentally Sensitive Areas will be marked on the plans, in the field, or in the contract by NDOT Environmental for avoidance. (NDOT Environmental, District Construction, Contractor)

Whooping Crane

- WC-1** Construction activities will not occur during Whooping Crane migration periods. (Spring migration: March 6 – April 29; and fall migration: October 9 – November 15). (NDOT Environmental, Construction, Contractor)

OR

- WC-2** If construction activities occur during Whooping Crane migration periods (Spring migration: March 6 – April 29; and fall migration: October 9 – November 15), NDOT trained personnel, or a qualified biologist, will conduct surveys according to protocol at the following locations: length of project (*location of suitable habitat*) **(prior to the start of daily construction activities)**. If species are present, the District will notify the Contractor to stop work within 1/2 mile of the whooping crane and follow the protocol to determine when work can resume **(also not initiate work if species is found in the morning survey)**. Options for resuming work may include but are not limited to: (NDOT Environmental, Construction, Contractor)

- Construction activities are limited to the hours from 10:00 a.m. to 4:00 p.m. (CST) during the migration period, unless morning survey indicates Whooping Cranes are not present.
- If a whooping crane is observed during the survey within 1/2 mile of the project but departs the area (further than 1/2 mile from the project), then work can resume. Document this departure according to protocol.

- WC-3** Herbaceous species used for re-seeding within 1/4 mile of the following location: (length of project) (*location of suitable habitat*) will be native grass or forb species. Native shrub or woody species used in restoration should reach no more than 4 feet in height at maturity. (Design, NDOT Environmental)

AND

- R-11** For the **whooping crane**, nighttime work with lights from March 6 – April 29 and October 9 – November 15 is not authorized. If nighttime work is required during this timeframe, the Contractor will notify the District and the District will request approval from NDOT Environmental Section at least 10 working days prior to construction so consultation with the USFWS and NGPC can be initiated. Approval from these agencies is required. (NDOT Environmental, District Construction, Contractor)

Bald and Golden Eagle Protection Act

- Suitable **bald eagle** nesting and/or roosting habitat exists within 0.5 miles of the Environmental Study Area. If construction will begin between February 1 and April 15, a nest survey must be completed at least 1 but not more than 14 days prior to construction. If construction will begin between April 15 and October 1, a nest survey completed in March is sufficient, as nests will likely already be constructed if nesting will occur that year. However, a nest survey may be completed anytime during this timeframe, as long as it is completed prior to construction. If bald eagles are nesting in the area, consultation with NGPC and USFWS will be required prior to beginning construction activities.

NDOT Construction Project Managers should contact NDOT Environmental at 402-479-4464 or zach.cunningham@nebraska.gov at least 30 days prior to construction start to schedule Bald Eagle surveys.

Contact Person: Zach Cunningham, Highway Environmental Biologist, (402) 479-4464

Utilities

Utility relocation or replacement is not anticipated for the project. If utility relocation or replacement is required in a later phase of the project, a re-evaluation shall be required if: (1) federal funds will be used for the utility work; or (2) the project construction contractor will be responsible for the work. If this utility work is identified during final design, the project sponsor shall initiate the re-evaluation prior to project letting. If the work is identified during construction, the project sponsor shall initiate the re-evaluation prior to commencing utility work. (NDOT Environmental, NDOT District)

If either one of the above two conditions does not apply, later relocation or replacement of utilities shall be coordinated through NDOT and the Contractor per NDOT's Standard Specifications for Highway Construction, Subsection 105.06. Any environmental permits required for these utility relocations or replacements shall be the responsibility of the Utility. (NDOT District, Utility Provider(s))

Impaired Waters, MS4, and Section 402

If manure is specified for the project, manure shall not be placed within 50 feet of an impaired water or stream. Impaired waters and streams are described in the project contract. (NDOT Roadside Development and Compliance)

Areas disturbed during construction will be stabilized utilizing NDOT approved erosion control methods. A Temporary Erosion Control Plan will be required by NDOT Standard Specifications for Highway Construction. (NDOT Environmental)

Encountering Unexpected Waste

If contaminated soils/water or unexpected wastes are discovered, the Contractor shall stop all work within the immediate area. The Contractor shall secure the area of the discovery and notify the NDOT Construction Project Manager (CPM). The Contractor shall not re-enter the discovery area until allowed to do so by the CPM. At the time of discovery, the CPM and Contractor shall utilize the *NDOT Unexpected Waste Action Plan (UWAP)* to coordinate appropriate actions. The actions to be carried out by the NDOT CPM are (but not limited to): verification that the contractor has suspended construction activities in the area of the discovery, contact the Environmental Section Manager and make an entry into Site Manager that an unexpected waste discovery was made. The CPM shall then utilize the UWAP Site Discovery Check List to properly document the extent and type of waste. The CPM shall ensure that

proper disposal of the waste and any required health and safety mitigation is implemented by the Contractor. The Contractor is required by NDOT's Standard Specification section 107 (legal relations and responsibilities to the public) to handle and dispose of regulated material in accordance with applicable laws.

Traffic Disruption

This project shall be constructed under traffic with lane closures controlled by approved temporary traffic control. The project shall not result in traffic disruptions requiring detours, temporary roads, or ramp closures that are greater than 30 working days. (Contractor)

Access Disruption

Access to adjacent properties shall be maintained at all times during construction. Access may be disrupted temporarily at times due to construction activities, but shall not be closed. (Contractor)

Public Involvement

A minimum of one news release shall go to all local and area media and be posted on the NDOT website prior to the start of construction work. (NDOT District, NDOT Communications)

Borrow Site

Any material needed shall be provided by the Contractor. The Contractor shall try to obtain borrow from an upland site to prevent depletion issues. If the borrow site is within a depletion area of concern, the Contractor shall coordinate with the appropriate agencies and NDOT to offset or minimize impacts. The Contractor shall obtain all environmental clearances and permits required for the borrow site prior to obtaining borrow material for the project. (Contractor)

The Contractor shall have a staging area for the project where material and equipment for the project is stored (e.g. re-steel, forms, etc.). The Contractor shall be required to dispose of material removed as part of the project described above and miscellaneous obstructions encountered and removed along the project. The disposal shall be the responsibility of the Contractor. A waste site may be needed. The Contractor shall be responsible to obtain all permits and clearances and all conditions of those permits shall be followed. (Contractor)

Nighttime Work

Nighttime work is not authorized for this project. Request for nighttime work will require a reevaluation. (Contractor)

Contact Person: Scott Rupe, Highway Environmental Biologist, (402) 479-3565

Construction Stormwater

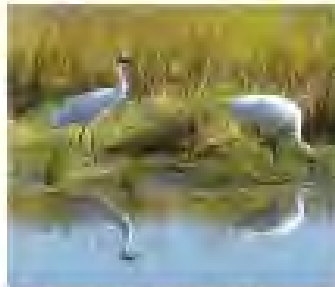
This project does not require a Construction Stormwater Permit or a Storm Water Pollution Prevention Plan (SWPPP). Temporary water pollution prevention practices (including sediment and erosion control measures) are still required by Nebraska State Title 119. The Contractor shall exercise every reasonable precaution throughout the life of the contract to prevent sedimentation within rivers, streams, impoundments (lakes, reservoirs, etc.), the project site, and adjacent property. (Contractor)

Contact Person: Ron Poe, Highway Environmental Program Manager, (402) 479-4499

Whooping Crane Fact Sheet



Whooping Cranes in Flight



Foraging Whooping Cranes



Adult with Juvenile

The Whooping Crane (*Grus americana*) is a federal and state listed endangered migratory species. The Whooping Crane was federally listed as endangered in 1967. Major river systems used by whooping cranes in Nebraska include the Platte, Loup, Republican, and Niobrara rivers. Additionally, a 3-mile-wide, 56-mile-long reach of the Platte River between Lexington and Denman, Nebraska, has been federally designated as critical habitat for whooping cranes. (Information from U.S. Fish and Wildlife Service)

Whooping Crane (*Grus americana*)

Order: *Gruiformes*

Family: *Gruidae*

Status: State and Federally Endangered. **Description:** L 52" (132 cm) W 87" (221 cm). Sexes similar but males are larger. White body with red and black facial markings. Yellow bill and long dark legs. Immature is white with tawny head and neck, and reddish-brown mottling on rest of body. **Habitat:** In Nebraska is found along the Platte Valley, with its wide slow moving river and associated sandbars and islands. Nearby wet meadows, croplands, and marshlands are important for foraging. **Status/Range:** Occasional spring and fall migrant along Platte Valley. 80% of sightings within 30 miles of Platte River, and 80% occurred between Lexington and Grand Island. **Call:** Shrill "ker-loo-ker-lee-loo" trumpet. **Comments:** Endangered. Management and protection programs slowly succeeding.

Similar: Sandhill Crane, Snow Geese, and especially American White Pelicans in flight: (Information from Nebraska Game and Parks Commission website)



American White Pelican

The Whooping Crane is one of the rarest birds in North America and also one of the largest. Whooping cranes are vulnerable to accidents during migration. Each spring they travel north from their wintering grounds around Aransas National Wildlife Refuge in Texas to their breeding grounds in Wood Buffalo National Park in central Canada (2,400 miles). Each fall this route is reversed. Their journey traverses eastern Montana, North Dakota, South Dakota, Nebraska, Kansas, Oklahoma and Texas. In Nebraska, they stop to rest and feed on the Platte, North and Middle Loup and Niobrara Rivers. (Information taken from the International Recovery Plan, Whooping Crane *Grus americana*; Third revision, 2007).

Whooping Crane Survey Protocol

Whooping Cranes can be disturbed by sight (human figures, equipment within sight) and sound (loud equipment, banging, etc.) that are abnormal (roadway traffic is normal), therefore surveys are needed to ensure disturbance is minimized.

Dates of Survey:

- o Spring Migration – March 6 – April 29
 - o Fall Migration – October 9 – November 15
- NDOT will receive migration updates from USFWS. Surveys are to be conducted 3 times a week until whooping cranes are reported in South Dakota (Fall) or Kansas (Spring), then they will be required daily. If all Whooping Cranes have moved out of the area, NDOT and USFWS will consult and no further surveys may be necessary.

Bridge Projects (Roosting Survey)

Time of Survey:

- o Prior to sunrise (published clock time) to make use of the beginning daylight hours, record start and stop time
- o Optional evening survey (after 4:00 pm) to check for birds potentially coming into roost
- o Do east side of bridge first to reduce glare from sun.

Method of Survey:

- o Stand at the four corners of the bridge – look at all up and down stream channels as far as you can see
- o Use binoculars or spotting scope
- o Watch for at least 15 minutes overall
 - o Look for bird movements – possibly moving within channel among vegetation
 - o Look for Whooping Cranes among Sandhill Crane groups
- o If cloudy, overcast or foggy and visibility is reduced to below 0.5 miles, allow time for clearing– take additional time to ensure the best survey possible

Linear Projects (Foraging Survey)-not crossing a major river

Time of Survey:

- o Survey project within one hour of start of workday, with at least one survey done no later than 10 am. Record start and stop time.
- o Survey by driving the area of project to be worked on that day and searching fields for birds within 0.5 miles of project.

For projects which are a combination of bridge and linear work use both methods.

If Whooping Cranes are not seen during the morning survey, work may begin after completion of the survey.

If Whooping Cranes are spotted within 0.5 miles of the active construction:

- o Do not start work.
- o Stop work if seen at times other than the morning survey.
- o Contact NDOT Environmental Section: Jon Soper 402-479-3546 or Zach Cunningham, 402-479-4464
- o Jon Soper or Zach Cunningham will contact USFWS and NGPC for further instructions.
- o Do not resume work at the bridge or within 0.5 mile of the abutments until NDOT Environmental Section relays the "all clear" message to the Project Manager.
- o Work can begin or resume if birds move off, record sighting, bird departure time, and work start time on survey form.

Updated 12/9/2014

Bald Eagle Fact Sheet

Bald Eagles (*Haliaeetus leucocephalus*) are very large, brown raptors that utilize the mature, forested areas along the major river systems in Nebraska. Nests are typically built near rivers, lakes and reservoirs and are most often in large cottonwood trees. Nests are constructed with large sticks and can become 8 feet across and 12 feet deep. A breeding pair will often return to the same nest and add new material each year.



Adult Bald Eagle



Bald Eagle in Flight



Bald Eagle Nest

The bald eagle gained protection under the Bald and Golden Eagle Protection Act in the Federal Register on June 8, 1940. This Act prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald eagles, including their parts, nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb."

Golden Eagle (*Haliaeetus leucocephalus*)

Order: *Accipitriformes*

Family: *Accipitridae*

Status: Protected by the Bald and Golden Eagle Protection Act

Description: L 35" W 80". Sexes similar, but females are about 25% larger than males. Adults readily identified by white head and tail, large yellow bill. Feet are also yellow. Juveniles are mostly dark, with blotchy white patches. Require four or five years to reach full adult plumage.

Habitat: Wooded river corridors and larger lakes/sandpits with the presence of large cottonwoods for nesting/roosting. Solitary trees have been used for nesting, but are associated with prime fishing locations. Eagles may establish winter roosts miles from foraging areas. In Nebraska, some communal roost sites can have as many as 100 eagles.

Status/Range: Bald eagles can be found statewide in Nebraska, and are present throughout the year as they both breed and winter here. Wintering eagle numbers fluctuate, as there are often few locations that provide adequate resources for eagles during winter.

Call: Weak staccato of chirping whistles, "kleek kik ik ik ik".

Similar Species: Immature bald eagles can be mistaken for golden eagles or turkey vultures.

Updated 12/9/2014

Bald Eagle Survey Protocol Nebraska Game and Parks Commission

Background

Bald eagles (*Haliaeetus leucocephalus*) utilize the mature, forested areas along the major river systems in Nebraska. Eagles are present throughout the year in Nebraska as they both breed and winter in Nebraska. Nest building activity may begin as early as December. Nests are typically built near rivers, lakes and reservoirs and in Nebraska are most often in large cottonwood trees, although bald eagles use other types of trees nationwide. The nests are constructed with large sticks and lined with leaves and grasses. A breeding pair will often return to the same nest and add new material each year. Nests can become 8 feet across and 12 feet deep. Nesting activities begin with egg laying which occurs as early as February. Fledging takes place when the young are approximately 10 – 11 weeks old, however the young remain near the nest and are dependent on the adults for food for at least another 6 weeks. In Nebraska, the nesting season continues through August.

The bald eagle southward migration begins as early as October and the wintering period extends from December through March. Breeding pairs may stay at their nest site year round if food is available. Eagles are often most numerous from late February through early March, when wintering numbers are supplemented by migrants that wintered further south. All migrants that breed elsewhere typically leave by late March. Wintering eagle numbers fluctuate from year to year, but birds typically concentrate in areas with large open water where food is available and form winter roosts. In Nebraska, there are often few locations that provide adequate resources for eagles during the winter. Protection of these areas is important, as relocation during the winter may impact survival. Roosts may be in deciduous or coniferous trees, but in Nebraska, most are in cottonwood trees. Eagles may establish winter roosts miles from the foraging areas (Keister et al. 1985). Winter roosting may assist with finding resources (Knight and Knight 1983) and pair bond formation. In Nebraska, some communal roost sites can have as many as 100 eagles (Nebraska Game and Parks Commission 1993).

Purpose

Eagle surveys are designed to ensure awareness and resolution to any potential conflicts between bald eagle and potentially disruptive human activities. To document the presence or absence of bald eagles and their activities, two types of surveys are recommended: nest surveys and winter roost surveys. These should be considered when a disturbance will occur within 0.5 miles of areas of suitable habitat for bald eagles.

Nest Surveys

Bald eagle nests are usually conspicuous and distinctive, but it must be stressed that nests can be well concealed and very difficult to see, particularly when trees have foliage. Nest surveys should complete a full inspection of potential trees for bald eagle nests within 0.5 miles of the project in areas considered suitable habitat. Transects should be recorded using GPS. In addition to nests, any bald eagles observed during the survey and their behavior should be noted. Potential nests should be observed from a distant location that does not disturb the eagles to confirm the presence or absence of eagles. Nest surveys are to be conducted by a qualified

January 19, 2007

Updated 12/9/2014

biologist. Results of surveys and transect locations should be sent to the Nebraska Game and Parks Commission and US Fish and Wildlife Service.

If construction will begin between February 1 and April 15, a nest survey must be completed at least 1 but not more than 14 days prior to construction. If construction will begin between April 15 and October 1, a nest survey completed in March is sufficient, as nests will likely already be constructed if nesting will occur that year. However a nest survey may be completed anytime during this timeframe, as long as it is completed prior to construction. If bald eagles are nesting in the area, consultation with NGPC and USFWS will be required, so it is in the project proponent's best interest to complete the survey and notify the agencies as early as possible.

(See timing diagram page 3)

Winter Roost Surveys:

For the purposes of avoiding adverse impacts to wintering bald eagles, two types of roosts are defined. *Transitory roosts* are defined as 3 or more eagles, within 100 meters of each other, for at least 2 nights in an area with no previous knowledge of winter communal roosting. *Communal roosts* are defined as 6 or more eagles in a small area for extended periods of time or used for multiple years. Communal roosts in Nebraska are monitored, so typically their existence will be known and conservation measures established prior to construction.

If construction will be occurring in an area near suitable habitat (near open water with large trees present) where there is no prior knowledge of a communal roost site and construction will be occurring between October 1 and January 31 winter roost surveys are necessary. Winter roost surveys should begin at least 1 day prior to the first date of construction. Winter roost surveys should be conducted daily at dawn as the eagles are likely to leave the roost to forage within the first hour of daylight (depending on weather conditions). These surveys need only be conducted in the area of active construction, not the entire project area. Surveys may be completed by a trained individual using appropriate binoculars or spotting scope. Survey reports should be submitted weekly to the Nebraska Game and Parks Commission and US Fish and Wildlife Service. Evidence of a roost should be reported immediately.

Please note, eagles seen soaring over a construction site should be watched to observe potential nesting or roosting, but construction does not need to terminate due to soaring behavior.

(See timing diagram page 3)

References:

Buehler, D.A. 2000. Bald Eagle (*Haliaeetus leucocephalus*). In The Birds of North America, No. 506 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.

Keister, G. P., Jr., R. G. Anthony and H. R. Holbo. A model of energy consumption in bald eagles: An evaluation of night communal roosting. The Wilson Bulletin. 97(2): 148-160

Knight, S. K. and R. L. Night. 1983. Aspects of food finding by wintering bald eagles. The Auk 100: 477-484.

Nebraska Game and Parks Commission. 1993. Nebraska's threatened and endangered species: Bald eagle. Nebraska Game and Parks Commission, Lincoln, Nebraska.

January 19, 2007

Updated 12/9/2014

Bald Eagle Survey Recommendations
 Timing Diagram
 Standard Protocol prepared by NE Game and Parks Commission
 January-07

	December	January	February	March	April	May	June	July	August	September	October	November	December
Bald Eagle Activity	Nest building			Hatching and rearing young					Winter activities				nest building
	Winter Activities		Egg laying and incubation				Fledging Young			Winter activities			winter activities
Required Surveys	C) Daily surveys for winter roosts		A) survey 2 weeks prior		B) One survey completed in March					C) Daily surveys for winter roosts			

- A) Projects starting between February 1 to April 15 must have a nest survey completed 1-14 days prior to the start of construction
- B) Projects starting between April 15 to October 1 need a nest survey completed as early as March, or before project begins
- C) Projects starting between October 1 and December need daily winter roost surveys completed

NOTE: Surveys are only necessary in areas where the disturbance is near suitable eagle habitat

Timing of eagle activity references:

Draft National Bald Eagle Management Guidelines, US Fish and Wildlife Service, 2006,
 Buehler, D.A. 2000. Bald Eagle (*Haliaeetus leucocephalus*). In The Birds of North America, No. 506 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.
 Nebraska Game and Parks Commission. 1993. Nebraska's threatened and endangered species: Bald eagle. Nebraska Game and Parks Commission, Lincoln, Nebraska.

January 19, 2007

WETLANDS 404 PERMIT

Nationwide Permit 3

Maintenance

- ☒ (a) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, requirements of other regulatory agencies, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized. This NWP also authorizes the removal of previously authorized structures or fills. Any stream channel modification is limited to the minimum necessary for the repair, rehabilitation, or replacement of the structure or fill; such modifications, including the removal of material from the stream channel, must be immediately adjacent to the project. This NWP also authorizes the removal of accumulated sediment and debris within, and in the immediate vicinity of, the structure or fill. This NWP also authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the district engineer, provided the permittee can demonstrate funding, contract, or other similar delays.

- ☒ (c) This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to conduct the maintenance activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. After conducting the maintenance activity, temporary fills must be removed in their entirety and the affected areas returned to pre- construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

2017 Regional Conditions

Check all the Regional Conditions that apply for this project under the non-notifying permit:

- ☒ **RC 9(a)** - All areas adjacent (contiguous, bordering, neighboring) to jurisdictional waters disturbed by construction shall be revegetated with appropriate perennial, native grasses and forbs and maintained in this condition. In accordance with Executive Order 13112, the use of invasive species and non-native species is not appropriate for revegetation of disturbed areas. A cover crop may be planted to aid in the establishment of native vegetation. The disturbed areas shall be reseeded concurrently with the project or immediately upon completion. Revegetation shall be acceptable when ground cover of appropriate perennial, native grasses and forbs reaches 75%. If this seeding cannot be accomplished by September 15 in the year of project completion, then an erosion blanket shall be placed on the disturbed areas. The erosion blanket shall remain in place until ground cover of appropriate perennial, native grasses and forbs reaches 75%. If the seeding can be accomplished by September 15, all seeded areas shall be properly mulched to prevent erosion.
- ☒ **RC 9(b)** - When the vegetation has become established, all temporary erosion control materials shall be removed from the project site. Biodegradable or photodegradable materials need not be removed.
- ☒ **RC 10(a)(i)** - The use of dredged material in the construction of **temporary structures** or used for temporary work or used as temporary fill shall not be allowed. The term "dredged material" is defined as material that is excavated or dredged from waters of the U.S. All temporary fill material shall be obtained from an upland source.
- ☒ **RC 10(a)(ii)** - Upon completion of the construction activity, all **temporary fill** material shall be removed in its entirety from the water of the U.S. to an upland area and the affected area shall be restored to its pre-construction condition. Wetlands disturbed by temporary construction shall be seeded with appropriate native hydrophytic species.

2017 General Conditions

Check all the General Conditions that may apply for this project under the non-notifying permit:

- ☐ **Aquatic Life Movements (GC #2)** - No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, less the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.
- ☐ **Spawning Areas (GC #3)**
- ☐ **Migratory Bird Breeding Areas (GC #4)**- Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
- ☐ **Shellfish Beds (GC #5)**

☒ **Suitable Material (GC #6)**- No activity may use unsuitable fill material as defined in the list below. Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

OMAHA DISTRICT PROHIBITED/RESTRICTED MATERIALS:

1. Vehicle bodies, farm machinery and metal junk, including appliances and metal containers, are prohibited.
2. The use of old or used asphalt paving material as a fill material and the use of new or used asphalt for bank stabilization or erosion control is prohibited.
3. The use of organic debris as fill material is prohibited. (Properly anchored trees, treetops, root wads, logs, and hay bales may be allowed on a case-by-case basis.)
4. Any material subject to leaching when in an aquatic environment is prohibited (for example, but not limited to, chemically-treated building material, roofing material, and wood debris).
5. Individual or unanchored tires are prohibited. (Tires may be allowed on a case-by-case basis when placed in the form of a mat or grid with multiple anchoring points to reduce the risk of design failure.)
6. Small aggregate (i.e. less than 6 inches in diameter) may not be placed below the ordinary high water mark (OHWM) of a water body for the purpose of bank stabilization or erosion control when such aggregate will be unstable or subject to frequent failure. Small aggregate may, however, be placed below the OHWM if its purpose is to fill the interstices of a well graded rock riprap revetment or channel lining.
7. Slab material, regardless of source, must be broken before placement so that the dimension of the largest slab will not be more than 3.5 times the dimension of the smallest slab (unless justified by a qualified engineer) and must be free of exposed rebar, wire and wire mesh.
8. The use of clean brick, broken concrete and cinder block for erosion control or bank stabilization will be considered on a case-by-case basis. If allowed, the broken concrete must be free of exposed rebar, wire, wire mesh, asphalt paving material, paint, and other erodible materials. Broken concrete must range in size from 6 to 36 inches (unless justified by a qualified engineer).

☐ **Adverse Effects from Impoundments (GC #8)** - If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water and/or restricting its flow must be minimized to the maximum extent practicable.

☐ **Management of Water Flows (GC #9)** - To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

☐ **Fills Within 100-Year Floodplains (GC #10)** – This activity must comply with applicable FEMA-approved state or local floodplain management requirements.

- Is a Floodplain Permit Required? Yes ☐ No ☒

☒ **Equipment (GC #11)** - Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

☐ **Soil Erosion and Sediment Controls (GC #12)** - Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

• SWPPP Required? Yes ☐ No ☒

☐ **Removal of Temporary Fills (GC #13)** – The use of dredged material in the construction of temporary structures or used for temporary work or used as temporary fill shall not be allowed. The term “dredged material” means material that is excavated or dredged from waters of the U.S. All temporary fill material shall be obtained from an upland source.

Upon completion of the construction activity, all temporary fill material shall be removed in its entirety from the water of the U.S. to an upland area and the affected area shall be restored to its pre-construction elevations. Wetlands disturbed by temporary construction shall be seeded with appropriate native hydrophytic species.

General Condition No. 13 (Removal of Temporary Fills) is amended by adding the following: When temporary fills are placed in wetlands, a horizontal marker (i.e. fabric, certified weed-free straw, a ground survey with minimum accuracy of 0.10-foot, etc.) must be used to demarcate the existing ground elevation of wetlands that will be temporarily filled during construction, in order to restore the wetlands to pre-project conditions.

☒ **Endangered Species (and Critical Habitat); Migratory Birds and Bald and Golden Eagles (GC # 18 and #19)**

T&E PQS Memo Date: 11/8/18

Click here to enter text.

Comments: No Effect ☐

May Affect or Not Likely to Adversely Affect ☒

☒ **Historic Properties (GC #20)** -

Project Effects Determination:

No Historic Properties Affected. ☒

No Potential to cause effects to historic properties. ☐

Date Received: 10/22/2018

☒ **Discovery of Previously Unknown Remains and Artifacts (GC #21)** – If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the District Engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed.

☒ **Water Quality (GC #25)** – See *Permit Compliance Section above*.

- ☒ **Activities Affecting Structures or Works Built by the United States (GC #31)** – There are no parts of the project that require permission from the USACE pursuant to 33 U.S.C. 408 (Condition 32(b)(10)).

Special Conditions:

Check all the Special Conditions that may apply for this project under the non-notifying permit:

- ☐ Any temporary fill (e.g. bridge debris, construction debris, etc.) discharged below the ordinary high water mark shall be removed on a daily basis. All debris shall be disposed of upland in such a manner that it cannot enter any wetlands or WOUS.
- ☒ Construction mats or timber mats must be used to minimize heavy machinery impacting any wetlands or waters of the U.S. All mats will be removed upon completion of construction and any disturbance of wetlands or waters of the U.S. will be restored by minor grading to preconstruction conditions. Disturbed areas will be seeded with perennials, native grasses and forbs. Erosion control measures will be implemented as appropriate. No construction debris or riprap shall be used as construction mats.
- ☐ Excavated and/or dredged material removed from the cofferdam locations shall be discharged into an upland area and shall not be side-cast or stored in wetlands or below the OHWM of the channel. Dewatering of the cofferdam area shall require the pump outlet to discharge onto a hard surface (wood, concrete, etc.), so as not to scour up sediment and carry it downstream. Following construction, the cofferdam shall be completely removed to an upland location.

STORM WATER DISCHARGES (1-43-1217)

In compliance with the Federal Water Pollution Control Act, authorization to discharge storm water on this project has been granted under National Pollutant Discharge Elimination System (NPDES) General NPDES Permit Number NER110000 for Storm Water Discharges from Construction Sites to Waters of the State of Nebraska. This permit became effective on January 1, 2008.

Contractors are advised that, under the Construction Storm Water General Permit, ***plant sites, camp sites, storage sites, and borrow or waste sites not shown on the plans may be subject to separate NPDES permit authorization requirements for stormwater discharges from those locations.*** Contractors shall be responsible for verifying the need for NPDES permit coverage with the Nebraska Department of Environmental Quality (NDEQ). When required for these locations, the filing of a "Notice of Intent" shall be made by the Contractor directly to the NDEQ.

Additionally, asphalt (SIC Code 2951) or concrete (SIC Code 3273) batch plants that are owned by a private Contractor and are operated on a contract-for-service basis to perform work for the Contractor completing the project may be subject to NPDES General Permit Number NER000000 for Industrial Storm Water Discharges. While the plant may be required for completion of the project, it is not under the control of the Department (or other project owner); and the filing of a "Notice of Intent" shall be made by the Contractor directly to the NDEQ.

The NDEQ may be contacted at 402-471-4220 for additional information.

REQUIRED SUBCONTRACTOR/SUPPLIER QUOTATIONS LIST (1-43-1217)

All bidders must provide to the NDOT the identity of all firms who provided quotations on all projects, including both DBEs and non-DBEs. This information must be on a form provided by the NDOT Contracts Office.

If no quotations were received, the bidder must indicate this in the space provided.

Each bidder will be required to submit one list per letting to cover all projects bid.

WORKER VISIBILITY (1-43-1217)

Pursuant to Part 634, Title 23, Code of Federal Regulations, the following modified rule is being implemented:

Effective on January 1, 2008, all workers within the right-of-way who are exposed either to traffic (vehicles using the highway for purposes of travel) or to construction equipment within the work area shall wear high-visibility safety apparel.

High-visibility safety apparel is defined to mean personal protective safety clothing that:

- 1 - is intended to provide conspicuity during both daytime and nighttime usage, and
- 2 - meets the Performance Class 2 or Class 3 requirements of the ANSI/ISEA 107-2004 publication titled "American National Standards for High-Visibility Safety Apparel and Headwear."

**SPECIAL PROSECUTION AND PROGRESS
(Federal Immigration Verification System)
(1-43-1217)**

The Contractor shall register with and use a Federal Immigration Verification System to determine the work eligibility status of newly hired employees physically performing services within the State of Nebraska. The Prime Contractor shall contractually require every subcontractor to register with and use a Federal Immigration Verification System to determine the work eligibility status of newly hired employees physically performing services within the State of Nebraska.

The Federal Immigration Verification System shall be an electronic verification of the work authorization program of the Illegal Immigration Reform and Immigration Responsibility Act of 1996, 8 U.S.C. 1324a, known as the E-Verify Program. The Contractor may use an equivalent Federal program designated by the United States Department of Homeland Security or other Federal agency authorized to verify the work eligibility status of a newly hired employee. The equivalent program shall comply with the Immigration Reform and Control Act of 1986.

The Prime Contractor shall furnish a letter to the NDOT Construction Division in Lincoln on company letterhead and signed by an officer of the company stating that documentation is on file certifying that the Contractor and all subcontractors have registered with and used a Federal Immigration Verification System. The Contractor shall maintain all records of registration and use for a period of three years and make records available upon request. The Contractor shall contractually require subcontractors to maintain all records for a period of three years and make records available upon request.

Payment will not be made to the Contractor for using the Federal Immigration Verification System or the maintenance of the records. This work shall be subsidiary to the work being performed.

The Contractor's Certification shall become part of the final records of the Contract. The Department considers this document to have direct bearing to the beginning interest date and may affect the amount of interest earned.

**PROPOSAL GUARANTY BID BOND (BID BOND)
(1-43-1217)**

Paragraph 1.b. of Subsection 102.14 in the Standard Specifications is void.

**PERMITS, LICENSES, AND TAXES
(Contractor Site Use Approval)
(1-43-1118)**

Paragraph 4. of Subsection 107.02 Paragraph 4. in the Standard Specifications is void and superseded by the following:

4. Contractor Site Use Approval:
 - a.
 - (1) When a Contractor intends to obtain borrow and/or dispose of excess excavation at a site (or sites) not shown or otherwise designated in the contract the Contractor shall submit a completed NDOT Form 119 "*Borrow Site - Waste Excavation Site Request Identification and Evaluation*" to the Lincoln Construction Office for processing and approval.
 - (2) When a Contractor intends to: (i) dispose of construction debris, (ii) stockpile materials, equipment or other tangible property for the project, and/or (iii) install and operate a mobile asphaltic concrete plant, mobile Portland cement concrete plant or other mobile production plant at a site (or sites) not shown or otherwise designated in the contract the Contractor shall submit a completed NDOT Form 56 "*Plant Site - Stockpile Site - Construction Debris Site Request Identification and Evaluation*" to the Lincoln Construction Office for processing and approval.
 - (3) The NDOT Form 56 and NDOT Form 119 (hereafter referred to as "the Contractor Site Request form(s)") can be found on the NDOT website. Each Contractor Site Request form shall represent only one site and shall be project specific.
 - (4) The time frame required to obtain site approvals varies and is dependent upon whether the project has a Corps Section 404 notifying-permit and upon the complexities of each site listed in each request.
 - b. The Contractor shall contact the Nebraska Department of Environmental Quality (NDEQ) to determine if it is necessary for the Contractor to obtain a NPDES permit. The Contractor shall also be responsible for obtaining any and all other permits required by local governments.

- c. The Contractor shall not begin work at any borrow, waste, debris, stockpile or plant site until receiving written approval for the submitted Contractor Site Request form(s) from NDOT, before obtaining a NPDES permit (if required), or any other permits required.
- d. No extension of completion time will be granted due to any delays in securing approval of a borrow, waste, debris, stockpile or plant site unless a review of the time frames concludes that there were conditions beyond the Contractor's control.

**MEASUREMENT AND PAYMENT
(Partial Payment)
(1-43-0318A)**

Paragraph 6 of Subsection 109.07 of the Standard Specifications is void and superseded by the following:

- 6. When payrolls must be submitted, the Department may withhold partial payments if the Contractor does not provide all payrolls (including Subcontractor payrolls) within seven (7) days of each payroll ending date.

**WAGES AND CONDITIONS OF EMPLOYMENT
(Employment of Labor – Payrolls)
(1-43-0119)**

Paragraph 3 of Subsection 110.03 of the Standard Specifications shall be amended to include the following:

- i. On projects requiring submittals of certified payrolls, Contractors shall submit their payrolls electronically, meeting the following requirements:
 - (1) Format – Portable Document Format (PDF)
 - (2) Size of file – Limited to 25 MB
 - (3) Signatures – A scanned copy of the original certified payroll or Adobe digitally signed.

Payrolls certified by the Prime Contractor must be emailed to the Project Manager within seven (7) days of the payment date thereof. Payrolls must be complete and accurate.

**LIABILITY INSURANCE
(1-49-0118)**

Paragraph 1.b.(5) of Subsection 107.15 in the Standard Specifications is void and superseded by the following:

- (5) Automobile liability coverage shall be obtained from an insurance carrier who is licensed in Nebraska and any other State in which the project is located.

Paragraph 1.c. of Subsection 107.15 is amended to include the following:

Limit: Statutory coverage for Nebraska and for any other State in which the project is located.

Paragraph 1.c.(3) of Subsection 107.15 is void and superseded by the following:

- (3) Workers' compensation coverage shall be obtained from an insurance carrier who is licensed in Nebraska and any other State in which the project is located.

Paragraph 1.f.(5) of Subsection 107.15 in the Standard Specifications is void and superseded by the following:

- (5) Prior to execution of the contract, Contractor shall provide the State of Nebraska, Department of Transportation evidence of such insurance coverage in effect in the form of an ACORD® (or equivalent) certificate of insurance executed by a licensed representative of the participating insurer(s). Certificates of insurance shall show the Nebraska Department of Transportation as the certificate holders.

Paragraph 1.f. of Subsection 107.15 is amended to include the following:

- (9) For so long as insurance coverage is required under this agreement, the Contractor shall have a duty to notify the State of Nebraska Department of Transportation (State) when the Contractor knows, or has reason to believe, that any insurance coverage required under this agreement will lapse, or may be cancelled or terminated. The Contractor must forward any pertinent notice of cancellation or termination to the State by mail (return receipt requested), hand-delivery, email, or facsimile transmission within 2 business days of receipt by Contractor of any such notice by an insurance carrier. Notice shall be sent to the State at the following address:

Nebraska Department of Transportation
Construction Division -- Insurance Section
1500 Highway 2, P.O. Box 94759
Lincoln, NE 68509-4759
Facsimile No. 402-479-4854
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CONSTRUCTION DETAILS
TEMPORARY WATER POLLUTION CONTROL
(2-1-1217)

Section 204 in the Standard Specifications is void.

CONSTRUCTION STORMWATER MANAGEMENT CONTROL
(2-1-1217)

A. General

1. This Section defines some best management practices (BMPs) for erosion and sediment control measures and construction practices the Contractor shall use to prevent soil erosion and avoid water pollution.
2.
 - a. The Department and the Contractor are co-permittees of the NPDES Construction Storm Water General Permit.
 - b. The Contractor shall comply with all conditions required by the current NPDES Construction Storm Water General Permit.
3. The Contractor shall exercise every reasonable precaution throughout the life of the contract to prevent silting of the waters of the state, the project site, and adjacent property. Construction of drainage facilities, as well as performance of other contract work which will contribute to the control of siltation, shall be carried out in conjunction with earthwork operations or as soon thereafter as is practicable.
4.
 - a. The Contractor shall take sufficient precautions to prevent pollution of the waters of the state, the project site, and adjacent property from construction debris, petroleum products, chemicals, or other harmful materials.

The Contractor shall conduct and schedule the operations to avoid interference with any protected species.
 - b. The Contractor shall comply with all applicable statutes relating to pollution of the waters of the state and fish and game regulations.
5. All construction debris shall be disposed in a manner that it cannot enter any waterway. Excavation shall be deposited as to protect the waters of the state from siltation.
6. All erosion and sediment control measures shall be properly installed and maintained by the Contractor until all permanent drainage facilities have been constructed, and all slopes are sufficiently vegetated to be an effective erosion deterrent; or until tentative acceptance of the work.

7. All erosion and sedimentation resulting from the Contractor's operations and the weather conditions must be corrected by the Contractor.

LIMITATION OF OPERATIONS (2-1-1217)

A. General

1. The maximum exposed surface area for the Contractor's operations in excavation, borrow, and embankment is 18 acres (72,800 m²) plus an equal area of clearing and grubbing/large tree removal. A written request for an increase in the maximum exposed surface area may be approved by the Engineer. This approval will be based on the soil, moisture, seasonal conditions, the Contractor's operation, or other conditions.
2. The Engineer shall have the authority to reduce the maximum exposed surface area when any of the following conditions warrant:
 - a. Soil and moisture conditions are such that erosion is probable.
 - b. Seasonal conditions may force extended delays.
 - c. Proximity to the waters of the state requires more stringent controls.
 - d. Equipment and personnel available on the job is not sufficient to properly maintain erosion and dust control measures.
 - e. Any other environmental condition in the area that may exist which would be affected by erosion from the project.
3. Construction operations in rivers, streams, wetlands, and impoundments shall be restricted to those areas specifically shown in the contract. Rivers, streams, wetlands, and impoundments shall be promptly cleared of all false work, piling, debris, or other obstructions placed therein or caused by the construction operations.
4. Fording and operation of construction equipment within streams and wetlands will not be allowed, unless explicitly allowed in the contract. Streams are defined as any area between the high banks, regardless of the flow conditions.

CONSTRUCTION METHODS (2-1-1217)

A. General

1. The Contractor shall conduct all construction activities and install temporary erosion control measures, as necessary, to control sediment and avoid soil erosion during construction.

2. The Contractor shall incorporate all permanent erosion control features into the project at the earliest practicable time.
3. Construction stormwater management control measures for Contractor obtained work areas located outside the right-of-way, such as borrow site operations, haul roads, plant sites, staging sites, waste sites, equipment storage sites, etc. are the sole responsibility of the Contractor. All construction stormwater management control measures for these areas are at the Contractor's expense. The Contractor is responsible for securing all required permits for use of these sites.
4. The construction stormwater management procedures contained herein shall be coordinated with any permanent erosion control measures specified elsewhere in the contract to the extent practical to assure economical, effective, and continuous erosion and sediment control throughout the construction period.
5. The Contractor shall be responsible to limit erosion and prevent siltation into the waters of the state during the construction period, as well as during the times that work may be suspended.
6.
 - a. All erosion and sediment control items shall be installed by personnel who are knowledgeable in the principles and practice of various BMP installations.
 - b. The installation of all erosion and sediment control items shall be done under the direct supervision of the Contractor's employee who has successfully completed training provided by the Department and has been certified as an Erosion and Sediment Control Inspector (Inspector). The Contractor's Inspector shall be present at each site during installation to direct and inspect all erosion and sediment control BMP installations.
 - i. The NDOT Erosion and Sediment Control Inspector Certification is obtained by completing an Erosion and Sediment Control Inspector Training Course provided by the Nebraska Department of Transportation and passing the examination that accompanies the training.
 - c. The Contractor shall notify the Engineer of all employees, who have been certified as Inspectors, who will be on the project to direct and inspect all erosion and sediment control BMP installations.
 - d. No payment will be made for any erosion and sediment control item unless a Contractor's Inspector was present to directly supervise and inspect the work.
 - e. No payment will be made for any erosion and sediment control item that is not properly installed. All erosion and sediment control items shall be installed as per the contract.

**ENVIRONMENTAL COMMITMENT DOCUMENT
(2-1-1217)**

A. Environmental Commitment Document

1. a. An Environmental Commitment Document will be created by the Department to identify all project specific environmental commitments and will be included in the Contract.
- b. The Department will provide information for the following, when applicable:
 - i. Storm Water Pollution Prevention Plan (SWPPP)
 - ii. U.S. Army Corps of Engineers (USACE) Section 404 Permit
 - iii. Nebraska Department of Environmental Quality 401 Water Quality Certification
 - iv. State Title 117 Waters (USACE Non-Jurisdictional)
 - v. Floodplain Permit
 - vi. Historic Clearance
 - vii. Endangered Species Act Clearance
 - viii. Nebraska Nongame and Endangered Species Conservation Act Clearance
 - ix. National Environmental Policy Act Compliance
 - x. NPDES Construction Stormwater Permit (within Right-of-Way limits, only)
 - xi. Conservation Measures
 - xii. Migratory Bird Treaty Act
 - xiii. Bald and Golden Eagle Protection Act Compliance
 - xiv. Other pertinent issues
- c. The Contractor shall provide information for the following, when applicable:
 - i. Temporary Erosion Control Plan
 - ii. Spill Prevention and Control Plan
 - iii. Migratory Bird Treaty Act Compliance Plan

- iv. Name and telephone number of the Contractor's representative responsible for the Environmental Commitments
- v. Name and telephone number of the employees that are NDOT-Certified Erosion and Sediment Control Inspectors
- vi. Critical Path Construction Schedule
- vii. Other items as defined elsewhere in the contract

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) (2-1-1217)

A. General

- 1. A SWPPP is required for projects that construction activities will cause a land disturbance of one (1) acre or more. The Department will prepare the SWPPP for the areas within the Right-of-Way, temporary easements and permanent easements.
- 2. For projects not requiring a SWPPP, the Contractor shall comply with the requirements of Environmental Commitment Document, Paragraph 1.b. of this Special Provision, as applicable.
- 3. Contractor obtained work areas, located on private property, are not included in the NDOT Project SWPPP.

B. Temporary Erosion Control Plan

- 1. The Contractor shall prepare and submit the Temporary Erosion Control Plan prior to the start of any work. The Contractor shall not begin work until the Temporary Erosion Control Plan has been submitted to the Engineer and appropriate erosion control measures are in place. Payment for any work on the contract will be withheld if erosion control measures are not in place or properly maintained.
- 2. The Temporary Erosion Control Plan will be reviewed at project progress meetings. All active Contractors shall have their Inspectors present and work in cooperation to determine any necessary changes. Necessary changes will be documented on the Temporary Erosion Control Plan by the Engineer.
- 3. Payment for preparing the Temporary Erosion Control Plan, inspections and meeting reviews are subsidiary to items that direct payment is made.

C. Spill Prevention and Control Plan

- 1. All project activities shall be addressed in the Spill Prevention and Control Plan. The Contractor shall prepare and submit the plan to the Engineer and install all appropriate spill prevention and control measures prior to the start of any work.

2. The Spill Prevention and Control Plan shall clearly state measures to prevent, contain, document and clean up a spill. It shall state measures for disposal of the contaminated material, disposal documentation and incident review to train personnel to prevent spills from reoccurring.
3. Spill Prevention and Control Plans are applicable to construction sites where hazardous materials are stored, used and/or generated onsite. Hazardous materials include, but not limited to, hazardous wastes, pesticides, paints, cleaners, petroleum products, fertilizers, solvents and porta-potty wastes.
4. Direct payment will not be made for the Spill Prevention and Control Plan.

D. Migratory Bird Treaty Act Compliance Plan

1. The Contractor shall not begin work until a Migratory Bird Treaty Act Compliance Plan has been submitted to the Engineer and appropriate nesting migratory bird avoidance measures are in place.
2.
 - a. The Contractor shall clearly state the necessary measures they intend to use to avoid a "Take" of nesting migratory birds in the Migratory Bird Treaty Act Compliance Plan. Measures may include but are not limited to:
 - i. Clearing and grubbing prior to April 1st or after September 1st
 - ii. Tree removal prior to April 1st or after September 1st
 - iii. Clearing empty nests on structures prior to April 1st
 - iv. Maintaining clear structures until commencement and throughout the duration of work on structures
 - v. Netting structures to prevent nesting
 - vi. Commitment to perform surveys according to protocol
 - vii. Hire a biologist to survey areas to be disturbed prior to commencement of work during the nesting season
 - viii. Submittal of required bird survey reports
 - ix. Training of Contractor Personnel to insure compliance
3.
 - a. The Migratory Bird Treaty Act Compliance Plan is applicable to the entire project site to avoid the "Take" of migratory birds protected under the Migratory Bird Treaty Act.
 - b. "Take" is defined as: pursuit, hunt, shoot, wound, kill, trap, capture, collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect.

4. The Migratory Bird Treaty Act Compliance Plan shall adhere to the NDOT's Avian Protection Plan located at:

<http://www.dot.nebraska.gov/media/3952/avian-protection-plan.pdf>

Direct payment will not be made for the Migratory Bird Treaty Act Compliance Plan.

E. SWPPP Inspection

1. The Contractor shall accompany the Engineer on inspections in accordance with the NPDES Construction Storm Water General Permit.
2. The SWPPP will be maintained and updated by the Engineer as work progresses and site conditions change to accurately describe the BMPs that are currently in place.
3. The Contractor's participation in SWPPP inspections, maintenance and updates shall begin on the first day construction activities cause land disturbance and end on the date of project completion as evidenced as the completion date in the District Engineer's Letter of Tentative Acceptance.
4.
 - a. The Contractor's Inspector shall be responsible for ensuring that all BMPs are installed in accordance with the contract or the manufacturers' recommendations. The Contractor's Inspector shall be capable of reading and interpreting these documents.
 - b. The Contractor's Inspector shall be familiar with product and structural BMPs. The Contractor's Inspector shall inspect, assess, and supervise the maintenance of erosion and sediment control BMPs to ensure compliance with the NPDES Construction Storm Water General Permit while preserving BMP functionality.
5. Payment for project inspection is subsidiary to items that direct payment is made.

ENVIRONMENTAL COMMITMENT ENFORCEMENT (2-1-1217)

A. General

1. This specification establishes payment and disincentive assessment for the Contractor's performance in complying with Contract Environmental Commitments.
2. Deficiencies are described but not limited to:
 - a. Failure to install pollution prevention control BMPs as work progresses or as described in the SWPPP.
 - b. Failure to maintain existing pollution prevention control BMPs.

- c. Failure to remove non-functioning pollution prevention control BMPs.
- d. Failure to comply with USACE Section 404 Permit requirements.
- e. Failure to comply with NPDES Construction Storm Water General Permit requirements.
- f. Failure to comply with all applicable statutes relating to pollution of the waters of the state.
- g. Exceeding the maximum exposed surface area for excavation of 18 Acres without written request for permission and written approval.
- h. Failure to comply with wildlife species-specific conservation conditions.
- i. Failure to comply with the Contract.
- j. Failure to comply with the Engineers directives.

B. SWPPP Deficiency Notification

- 1. The Engineer will document and direct the Contractor to correct deficiencies.
- 2.
 - a. The Contractor shall commence correcting deficiencies, provide adequate equipment and personnel, and diligently pursue correcting deficiencies without cessation until all deficiencies have been corrected.
 - b. The count of Working Days and/or Calendar Days will continue during the time period that corrective work is being performed.
 - c. Delays to the project as a result of the Contractor conducting corrective actions for the Contract Environmental Commitments will not constitute a valid reason for an extension of the contract time allowance.
- 3. Deficiencies shall be corrected within seven (7) calendar days of notification or within an approved extension. When deficiencies are not corrected within seven (7) calendar days or within an approved extension, the Engineer will make a disincentive assessment to the contract as stated herein.
- 4.
 - a. If soil, weather, or other conditions prevent the Contractor from completing the corrective actions within seven (7) calendar days, the Contractor shall notify the Engineer in writing. The Contractor's letter shall state the reasons preventing corrective action within the time allowed. The Contractor shall propose a written Corrective Action Plan within 48 hours. Corrective work shall continue while the Corrective Action Plan is developed. The Contractor's Corrective Action Plan must contain a course of action and a timeframe for completion. If the reasons and the Corrective Action Plan are acceptable, the Engineer may extend the time in which to complete the corrective work.

- b. The Contractor will be allowed to proceed with the plan as proposed without incurring a disincentive assessment. If all corrective work is completed within the time allowance shown in the Notification or within an approved extension, a disincentive assessment will not be imposed upon the Contractor.
 - c. Storm events or soil and weather conditions occurring on other projects, which interfere with a Contractor completing corrective actions on the project within seven (7) calendar days, will not be justification for a time extension to complete the corrective work.
- 5. If all corrective work identified in the Notification has not been completed at the end of the seventh (7th) calendar day after the Initial Notice Date or within an approved extension, a Shut-Down Notice will be issued on the eighth (8th) calendar day after the Initial Notice Date or on the calendar day following the last day of an approved extension.
- 6. All operations shall cease as of the date and time cited in the Shut-Down Notice. The Contractor shall work, exclusively, on the deficiencies until all have been corrected or as directed by the Engineer. Upon issuance of the Shut-Down Notice, a disincentive of \$500.00 per deficiency per calendar day will be assessed thru the day the corrective work is completed, inclusive.
- 7. The Engineer may require the Contractor to provide a written Procedures Plan that describes the process to prevent reoccurrence of deficiencies. The written Procedures Plan shall be provided within two (2) calendar days of the request. Failure to correct all deficiencies and provide a Procedures Plan may result in payments being withheld until such time that procedures are outlined.
 - a. Payment for preparing a written Procedures Plan is subsidiary to items that direct payment is made.

C. Storm Event Restoration – Incentive and Disincentive

- 1. The Department will pay “Storm Event Restoration - Incentive” when the Contractor completes the restoration work to eliminate the pollution prevention control deficiencies within seven (7) calendar days of Notification or within an approved extension. Multiple deficiencies may be included in one notification. If the restoration work has not been completed within seven (7) calendar days after the Initial Notice or within an approved extension, payment for the item of “Storm Event Restoration - Incentive” will not be made.
- 2. A storm event is defined as a storm exceeding 0.50-inch of rain in a 24-hour period.
- 3. The Department will notify the Contractor of pollution prevention control deficiencies.
- 4.
 - a. Payment for the item of “Storm Event Restoration - Incentive” may not be made when the Contractor is notified to correct pollution prevention devices not installed in accordance with the contract or the manufacturer’s recommended installation instructions.

5. If the restoration work is not completed within seven (7) calendar days or within an approved extension, a disincentive assessment of \$500.00 per deficiency per calendar day will be assessed. The disincentive assessment will begin on the eighth (8th) calendar day after the issuance of the Initial Notice Date or on the calendar day following the last day of an approved extension(s) and continue through the day that the restoration work is completed, inclusive.

D. Method of Measurement

1.
 - a. “Storm Event Restoration – Incentive” will be measured by the each upon completion of restoration of all deficiencies included in a notification within the allowed time and only one payment per notification is allowed when multiple deficiencies are included on the notification.
 - b. If deficiencies from multiple notifications are restored during the same restoration operation, only one (1) incentive is eligible for payment.
 - c. If multiple notifications are the result of successive storm events and deficiencies are transferred to ensuing notifications, incentive payment is only eligible for the latest notification.
2. “Storm Event Restoration – Disincentive” will be measured by the calendar day in accordance with Paragraph C.5. above.

E. Basis of Payment

- | | | |
|----|--|---|
| 1. | Pay Item
Storm Event Restoration – Incentive
Storm Event Restoration – Disincentive | Pay Unit
Each
Calendar Day |
|----|--|---|
2. All equipment, materials, etc. used in the restoration work will be paid for in accordance with Division 800 of the Standard Specifications.
 3. Payment is full compensation for all other incidentals required to complete the restoration work included in the notification within the allowed time.

F. Environmental Commitments – Contractor Compliance

1. To provide payment for all plans, inspections, surveys, reports, travel, qualified inspection person's, carrion removal, and any other subsidiary activities for the work of implementing threatened and endangered species commitments, temporary erosion control or any other environmental commitments prescribed in the contract.
2. Multiple visits to the project may be required to comply with environmental commitments prescribed in the contract.

G. Method of Measurement

1. No measurement is required.

H. Basis of Payment

- | | | |
|----|--|-----------------------------|
| 1. | Pay Item
Environmental Commitments – Contractor Compliance | Pay Unit
Lump Sum |
|----|--|-----------------------------|
2. Partial payments will be made as follows:
 - a. The Department will pay 50 percent of the total amount bid for the item Environmental Commitments – Contractor Compliance within seven (7) calendar days after the Notice to Proceed Date.
 - b. Upon completion of 50 percent of the Original Contract Amount, the Department will pay 30 percent of the amount bid for the item Environmental Commitments – Contractor Compliance.
 - c. Upon completion of 75 percent of the Original Contract Amount, the Department will pay the remaining 20 percent of the amount bid for the item Environmental Commitments – Contractor Compliance.
 - d. Failure to comply with any or all of the contract requirements, included for payment under the item of Environmental Commitments – Contractor Compliance, will preclude all payment for the item, including any previous payment.
 3. Payment is full compensation for all work prescribed in the contract.

I. Immediate Action Deficiencies

1. Deficiencies that pose an imminent threat to the environment are considered an emergency situation. These deficiencies will be identified in the Immediate Action Deficiencies Section of the Environmental Commitment Deficiency Notification Form. The corrective work for Immediate Action Deficiencies shall begin immediately and continue without cessation until completed.
2. The Engineer will issue a shut-down notice. All work on the contract shall cease until the corrective work has been completed. The Engineer may allow the Contractor to continue working in areas unaffected by the Immediate Action Deficiency, provided corrective actions are being actively performed on the deficiency.
3. Immediate Action Deficiencies are not eligible for an incentive payment.
4. The Contractor will be assessed a disincentive assessment of \$1,000.00 per deficiency per calendar day for failure to begin corrective actions or failing to continue to completion as directed by the Engineer or by the regulatory agency with jurisdiction.
5. Examples of Immediate Action Deficiencies include but are not limited to:
 - a. Threatened & Endangered Species habitat protection deficiencies
 - b. USACE Section 404 Permit Noncompliance

- c. Petroleum Spills/Tank Leakage
- d. Hazardous Material Spills

J. Rights Reserved

1. The Department reserves the right to initiate and perform corrective action on any deficiencies which result from the Contractors' actions, inactions, or for failure to comply with the NPDES Construction Stormwater General Permit, USACE Section 404 Permit, or any other applicable permit.
2. The Contractor shall be liable to the Department for any and all costs incurred by the Department for corrective actions taken by the Department.
3. It is expressly understood that the provisions of this specification shall not relieve the Contractor of their responsibilities nor shall it relieve the Surety of its obligation for and concerning any just claim.
4. The Contractor shall indemnify and save harmless the Department and all of its representatives from any and all actions or claims brought because of the Contractor's actions, inactions, or for failure to comply with the NPDES Construction Storm Water General Permit, USACE Section 404 Permit, or any other applicable permit.

**HAZARDOUS MATERIALS MANAGEMENT
(2-1-1217)**

Description

This work shall consist of minimizing the exposure of the environment, including waters of the state, to hazardous materials. This specification also includes the requirements for clean-up of releases of hazardous materials.

Material Requirements

1. Prior to beginning work on the project, the Contractor shall prepare a Spill Prevention and Control Plan (SPCP) that clearly states measures to prevent a spill, contain a spill, clean up a spill, dispose of contaminated materials and train personnel to prevent and control spills. The plan shall include the notification contacts, as well as the processes and timeframes to address the situation in the event that a spill occurs. The following shall be included in the plan:
 - a. A site plan showing locations for loading of equipment and materials, storage of equipment and materials, equipment fueling and wash areas, portable toilet locations and waste disposal areas.
 - b. Descriptions of the following that may be used on projects:
 - i. Best Management Practices (BMPs) for secondary containment.

- ii. Description of spill response equipment and materials, including safety and clean up equipment.
 - iii. Preventative inspection and maintenance techniques for equipment to minimize leaks.
 - iv. Procedures for filling tanks and equipment to prevent spills.
 - v. Procedures for containing, diverting, isolating and cleaning up a spill.
 - vi. Procedures and BMPs to be administered at bridge and culvert sites to ensure that hazardous materials do not runoff.
 - (1) When water is present, immediate action to contain and remediate a spill is required.
 - (2) The Contractor shall notify the NDOT Project Manager and NDEQ upon release of any quantity of material to waters of the state. The NDOT Project Manager will notify the NDOT Environmental Section upon notification of a release.
 - vii. Spill training agenda and materials for the Contractor's staff and subcontractors.
- c. Identify individuals responsible for implementing the plan.
 - d. Specify how and when to notify appropriate authorities such as Nebraska Department of Environmental Quality and Nebraska State Patrol.
- 2. The Contractor shall provide and maintain a spill kit with appropriate materials to clean up minor spills on site as described in the Spill Prevention and Control Plan. A minor spill is defined as a release that is less than the reportable quantity for a given material and not entering waters of the state.
 - 3. Material Safety Data Sheets (MSDS) shall be maintained on site for all hazardous materials being used or stored for the project. The MSDS Sheets shall contain reportable quantities and spill response information.

Construction Methods

- 1. The Contractor shall store paints, solvents, pesticides, petroleum products, and other hazardous materials in areas with secondary containment.
- 2. Hazardous materials storage, including portable toilets, shall be restricted to specific areas away from:
 - a. vehicular traffic
 - b. restricted areas shown on the plans
 - c. waters of the state, including wetlands (50 feet minimum distance)

- d. Wellhead Protection Areas, unless designated in a Wellhead Protection Plan that has been approved by the local authority.
3. The Contractor shall inspect hazardous material containers weekly to ensure that all containers are clearly identified and that no leaks are present.
4. The Contractor shall inspect the site weekly to ensure that cleanup procedures are posted and that a spill kit is adequately stocked and readily available.
5. The Contractor shall verify and update the SPCP site maps as necessary during inspections to accommodate changes in the site.
6. A spill kit shall be readily available, in close proximity and appropriately stocked when applying petroleum based or other hazardous materials to bridge and culvert sites.
7. The Contractor shall develop, implement and maintain a training program regarding hazardous materials management. Training of the Contractor's staff and subcontractors shall be conducted to ensure that workers are knowledgeable of the procedures, materials and equipment outlined in the SPCP. The Contractor shall maintain a database of individuals that have been trained.
 - a. Specific hazardous materials and their handling procedures shall be discussed during safety briefings.
8. The Contractor shall maintain and provide to the Project Manager, upon request, a record of all spills occurring on site. This record shall include:
 - a. The circumstances leading to the spill
 - b. The date of the release
 - c. Measures taken to resolve the incident
 - d. Measures taken to prevent a recurrence
9. The Contractor shall follow NDEQ notification procedures for all spills in excess of a reportable quantity as defined by NDEQ Title 126 or the products MSDS Sheets. The NDOT Project Manager will notify the NDOT Environmental Section.
10. The Contractor shall follow all local, state and federal regulations associated with the release and/or cleanup, including disposal of the hazardous material.

Method of Measurement and Basis of Payment

1. Direct payment will not be made for work associated with Hazardous Materials Management, but is considered subsidiary to the items for which direct payment.
2. The Contractor shall solely bear all penalties and costs associate with the containment, cleanup, remediation and disposal of material associated with a spill.

**ACCEPTANCE TESTING OF SOILS BY USE OF THE LIGHT WEIGHT
DEFLECTOMETER (LWD) SCOPE
(2-2-1217)**

This test method covers the in-place measurement of deflection and moisture content of Class III embankments, subgrade preparation, granular fill and backfill for acceptance testing on Nebraska Department of Transportation Projects. Refer to Subsection 205.03 of the NDOT Standard Specifications for Highway Construction for a definition of Class III embankments. Refer to NDOT Test Method T 2835 for the proper operation of the LWD.

The deflection test measurement shall be the average measured deflection of the fourth, fifth, and sixth drops of the falling weight of the LWD. The first three drops are to be used to seat the LWD.

The Deflection Target Value (DTV) is the deflection value of each soil determined by using a test strip or from correlation with the Nebraska Group Index for an individual Soil.

Option 1

A. Determination of DTV using a Test Strip

1. A test strip shall be constructed for each soil type to determine the deflection target value.
2. A new test strip shall be constructed when there is an observed change in material or as determined by the Engineer.
3. The test strip dimensions for roadway embankment and subgrades shall have a minimum length of 200 feet and a width equal to the embankment or roadway. The total thickness shall be no less than 6 inches for roadway subgrade and no less than 1 foot and no more than 3 feet for roadway embankment.
4. The test strip dimensions for trenches, culverts, and structures shall have a minimum length of 10 feet and a width equal to that of the excavation. The total thickness shall be no less than 1 foot and no more than 3 feet.
5. The optimum moisture of fine-grained soils shall either be determined in the NDOT Branch Lab or Central Lab, and shall be based on a correlation with the Plastic Limit or determined from AASHTO T-99. A 10-lb sample of proposed material shall be submitted to the NDOT Branch Lab or Central Lab a minimum of 14 days prior to grading operations.
6. The moisture content for granular soils shall be "as necessary" to achieve proper compaction.
7. The moisture content limits of the soil shall follow the requirements provided in Table 1.
8. The test strip area construction shall be incidental to the embankment construction.
9. The testing rate during the test strip construction is provided in Table 2.

Table 1 - Moisture Requirements

Location	Soil Type	Depth Below Finished Subgrade	Minimum %	Maximum %
Soil materials receiving concrete pavement	Silt – Clay Silt- Clay Granular	Upper 3 feet Greater than 3 feet All Depths	Opt. -3 Opt. -3 **	Opt. +2 Opt. +2 **
Soil materials receiving flexible pavement	Silt – Clay Silt- Clay Granular	Upper 3 feet Greater than 3 feet All Depths	Opt. -2 Opt. -3 **	Opt. +1 Opt. +2 **
Soil materials receiving gravel surfacing	All materials	All Depths	**	**
Subgrade prep. Shoulder subgrade prep (concrete pavement)	Silt – Clay Granular	The upper 6 inches of subgrade soil	Opt. -3 **	Opt +2 **
Subgrade prep. Shoulder subgrade prep (flexible pavement)	Silt – Clay Granular	The upper 6 inches of subgrade soil	Opt. -2 **	Opt +1 **
Stabilized Subgrade	-	-	See Specifications	
Granular Structural Fill (MSE Walls, bridges, culverts, et.)	Granular	All Depths	**	**

** Moisture as necessary to obtain proper compaction. The moisture target value for granular materials shall be established in the field by the Contractor during the compaction process. Once established the target moisture shall not vary by more than $\pm 2\%$.

Table 2 - Test Strip Testing Rate

Material Location	Minimum Testing Rate
Roadway embankment and subgrade	3 tests/ pass*
Trenches, culverts, and miscellaneous structures	1 test / pass*

* Number of passes with compaction equipment as described in paragraph 13c of Subsection 205.03 of the NDOT Standard Specifications for Highway Construction.

B. Test Strip Construction and Testing

1. Prior to placing the fill material for the test strip, the subgrade shall be scarified and re-compacted.
2. The fill material shall be placed with a lift thickness no greater than 8 inches uncompacted.
3. The test strip shall be constructed with uniform material and moisture content, and compaction; until it meets the requirements of numbers 3 or 4 of Section A of this provision.
4. The deflection target value is obtained when:
 - i. The moisture content is within the acceptable range.

- ii. The average of the deflection test measurements for three consecutive passes of compaction equipment does not change by more than 10% with additional compaction. The DTV shall be based on the lowest average deflection test measurement from these passes.
- 5. A 10-lb sample of the test strip material shall be submitted to the NDOT Branch Lab or Materials and Research Soil Lab for index testing.
- 6. The DTV shall be re-evaluated when:
 - i. Deflection test measurements are consistently less than the DTV. (3 out of 5 consecutive deflection test measurements are less than 0.80 of the DTV).
 - ii. Failing test results are consistently occurring and adequate compaction is observed.

Option 2

C. Determination of Deflection Target Values based on the Nebraska Group Index (NGI)

- 1. Prior to construction a 10-lb bag of representative material shall be submitted to the nearest NDOT Branch Lab or Materials and Research Soil Lab for each different soil type no less than 21 days prior to grading operations.
- 2. From the laboratory testing NDOT will determine the Nebraska Group Index (NGI) for each soil type submitted and provide a correlated minimum DTV and optimum moisture content.
- 3. If no correlation data is available for an individual NGI, a test strip shall be used to determine the DTV as discussed in parts A and B in this provision.
- 4. The DTV shall be re-evaluated when:
 - i. Deflection test measurements are consistently less than the DTV. (More than 20% of the deflection test measurements are less than 0.80 of the DTV).
 - ii. Failing test results are consistently occurring and adequate compaction is observed.

Acceptance Testing

- 1. The Deflection Target Value for use as acceptance testing shall be:
 - DTV \leq 1.10 x average deflection value determined from Option 1, Part B, of this provision
 - DTV \leq Correlated DTV determined from the NGI correlation, Option 2, Part C

2. The testing frequency for moisture and deflection shall follow the NDOT Materials Sampling Guide.
3. The moisture content of soil shall be performed using NDOT's approved equipment and methods. Approved equipment includes: 1) hot plates, stove, or microwave, 2) Speedy Moisture Method, or 3) Laboratory oven method.
4. Moisture content results shall be reported to the nearest tenth of a percent.

REMOVAL OF UNSUITABLE MATERIAL

This work shall consist of removing and disposing of unsuitable material at the locations shown in the plans, and backfilling with suitable embankment material.

The Contractor shall dispose of the unsuitable material at a site off the project.

The work of removing and disposing of the unsuitable material will be measured by the cubic yard in place and shall be paid for at the contract unit price per cubic yard for the item, "Removal of Unsuitable Material". This price shall be considered full compensation for all costs required for the removal and disposal of the material, including the embankment and water required to fill the void after the removal of the unsuitable material.

FOUNDATION COURSE (3-1-0319)

Paragraph 8. of Subsection 1033.02 in the Standard Specifications is void.

Section 307 in the Standard Specifications is void and superseded by the following:

307.01 – Description

1. The foundation course is a layer of compacted material conforming to the lines, grades, and dimensions shown in the contract. The foundation course shall be built on a finished subgrade. The Contractor shall complete the following requirements under the foundation course bid items including but not limited to:
 - a. Adjust grade lines to meet intersections, pavements, bridge ends, railroad crossings, or any other physical features designated by the Engineer.
 - b. Process the source material.
 - c. Place the foundation course.
 - d. Compact the foundation course.
 - e. Profile the foundation course.
 - f. Dispose of excess material after profiling is completed.

2. The types of foundation course are:
 - a. Bituminous.
 - b. Crushed concrete.
 - c. Aggregate Foundation Course – D.

307.02 – Material Requirements

1.
 - a. All samples, including field samples, will be washed according to AASHTO T 11 prior to performing sieve analysis. All samples will be taken from the project grade prior to the spreading and profiling operations.
 - b. The Contractor shall handle all material in such a manner that prevents contamination.
2. Bituminous Foundation Course:
 - a. Material used in constructing bituminous foundation course shall consist of salvaged bituminous material. The source of the salvaged bituminous material will be described in the contract.
 - b. All salvaged bituminous material must be less than 3 inches (75 mm) in maximum dimension and shall not contain more than 5% by weight of material retained on a 2 inch (50 mm) sieve just prior to its use.
 - c. Contractor Production
 - (1) All salvaged bituminous material produced by the Contractor from pavement removal or by cold milling material from existing pavement structures on the project, whether hauled directly to the site of use or temporarily stockpiled, shall be screened to meet the requirements of Paragraph 2.b.
 - (2) If, after screening, there is insufficient material to produce the plan quantity, the Engineer may order the oversized salvaged bituminous material to be further processed at no cost to the State prior to delivery to the roadway. Processing shall mean crushing, pulverizing, re-screening, or a combination of these methods.
 - (3) On projects that allow multiple foundation course materials to be used, the Engineer may direct that salvaged bituminous material continue to be placed as bituminous foundation course to the extent this material is available and can be utilized on the project.
 - (4) Unless otherwise shown in the contract, all Contractor produced salvaged bituminous material, including oversized material, remaining at the end of the bituminous foundation course

operation shall become the property of the Contractor and removed from the project.

- (5) The salvaged bituminous material shall be free of deleterious matter as determined by the Engineer.

d. Department Provided Stockpiles

- (1) If the salvaged bituminous material is to be obtained from existing stockpiles described in the contract, the salvaged bituminous material shall be screened to meet the requirements of Paragraph 2.b. prior to delivery to the roadway. Any oversized bituminous material remaining from the screening operation shall remain the property of the Department.
- (2) If, after screening, there is insufficient material to produce the plan quantity, the Engineer may order the oversized salvaged bituminous material to be further processed for use as Bituminous Foundation Course. Processing shall mean crushing, pulverizing, re-screening, or a combination of these methods. This will be paid for as Extra Work as described in Paragraph 5. of Subsection 104.02.

3. Crushed Concrete Foundation Course:

- a. Material used in constructing crushed concrete foundation course shall consist of processed and stockpiled concrete pavement. The source of the materials for the crushed concrete will be described in the contract. Crushed Concrete shall be free of deleterious matter as determined by the Engineer.
- b. All samples will be taken from the project grade prior to spreading and profiling. The crushed concrete gradation shall be determined as described in NDOT T 27 (washed test). The gradation requirement for the crushed concrete foundation course is shown in Table 307.01. Material represented by samples with 15% or more passing the No. 200 (75 µm) sieve will be subject to removal.
- c. Material gradation will be accepted by the table below on a lot basis of 2,500 cubic yards on the average of 5 consecutive tests, one for each 500 cubic yard subplot. If at the end of the project, the final lot consists of less than 2,500 cubic yards, a minimum of 3 samples, or 1 sample for each 500 cubic yards or fraction thereof, whichever is greater shall be taken and tested and acceptance based on the average of those tests.
- d. Moisture content shall be no higher than necessary to facilitate compaction to the required stiffness.

Table 307.01

Crushed Concrete Foundation Course Gradation Requirements	
Sieve Size	(Percent Passing)
1½ inch (37.5 mm)	100 minimum
¾ inch (19.0 mm)	85 maximum
No. 4 (4.75 µm)	20 to 50
No. 200 (75 µm)	0 to 8

4. Aggregate Foundation Course-D
 - a. Aggregate Foundation Course-D shall be a non-recycled virgin material.
 - b. Aggregate shall conform to the quality requirements of Paragraphs 1. and 2. of Subsection 1033.02.
 - c. Mineral aggregates shall have a Los Angeles Abrasion loss percentage of no more than 40% by weight.
 - d. Mineral aggregates shall have a soundness loss of no more than 12% by weight at the end of 5 cycles using the Sodium Sulfate Soundness test.
 - e. At least 14 days before beginning foundation course production, the Contractor shall submit a proposed mix design along with a 50 pound (23 kg) sample of each aggregate to the Engineer for approval. The mix design will:
 - (1) Result in an aggregate mix that meets the gradation requirements of Table 307.02
 - (2) Propose single defined values for the percentage passing each sieve on the gradations of Table 307.02.
 - (3) Include the average aggregate gradations used to calculate the mix design.
 - (4) Create a fine aggregate angularity value of 43.0 or greater. The specific gravity for calculation of the Fine Aggregate Angularity (FAA) shall be determined on a combined aggregate sample of the material passing the No. 8 (2.36 mm) sieve and retained on the No. 100 (150 µm) sieve as defined in AASHTO T 304 Method A, except the specific gravity material shall be washed over the No. 100 (150 µm) sieve.
 - f. The Engineer will determine the optimum moisture content for the proposed foundation course design in accordance with the compaction requirements.

Table 307.02

Aggregate Foundation Course-D Gradation Requirements		
Sieve Size	Target Value (Percent Passing)	Tolerance
1/2 in (12.5 mm)	100	0
3/8 in (9.5 mm)	100	-4
No. 4 (4.75 mm)	93	±4
No. 10 (2.0 mm)	55	±10
No. 30 (600 µm)	25	±5
No. 40 (425 µm)	20	±4
No. 200 (75 µm)	3	±3

307.03 – Construction Methods

1. The Contractor shall process, load, haul, uniformly distribute, place, compact and profile the foundation course as shown in the contract.
2. Rolling pattern and deflection target value:
 - a. The Department will establish a rolling pattern and set a deflection target value.
 - b. The Department will monitor the rolling pattern with a lightweight deflectometer. If conditions change, the Engineer may require the rolling pattern be adjusted to attain optimal stiffness. Additional testing of separately placed irregular areas will be performed, as directed by the Engineer, to determine the necessary rolling pattern (or other type of compaction work) needed to attain optimum stiffness.
 - c. The Contractor shall roll the foundation course until no further compaction can be obtained, and roller marks are eliminated.
 - d. The Contractor shall take immediate action to adjust the rolling pattern whenever the Engineer determines that the foundation course stiffness variance is outside the tolerance of the deflection target value.
3. Profiling:
 - a. After the foundation course has been compacted and before the surface is profiled, the thickness shall be measured.
 - b. If the thickness of the compacted material is insufficient to permit profiling, the deficiency shall be corrected by the placement and compaction of additional material.
 - c. The profiling operation may be accomplished by milling, if necessary.
 - d. During the profiling operation, the control of grade and cross slope shall be maintained by the Contractor.

- e. The accuracy of the preparation of the subgrade and the profiling of the foundation course will be such that the profile grade will not vary from the contract by more than ½ inch.
 - f. The grade stakes placed for controlling the profiling operation shall be protected so that they are available for controlling the pavement operation.
4. Surface Protection:
- a. The Contractor shall only allow necessary local traffic and essential construction equipment on the foundation course.
 - b. The Contractor shall repair or replace marred, distorted, or otherwise damaged foundation course at no additional cost to the Department.
5. Material from the profiling operation may be reused if it meets the material requirements. Material not meeting the material requirements shall be wasted and removed from the project.

307.04 – Method of Measurement

- 1. Foundation course will be paid for by the square yard (square meter). Foundation course will not be measured directly. The measured pavement quantity of the overlying pavement is to be used as the foundation course quantity.
 - a. Any thickness in excess of the specified thickness of foundation course will not be measured for payment, but will be considered subsidiary to the respective foundation course pay item.
- 2.
 - a. Screening of salvaged bituminous material will not be measured for payment.
 - b. Processing of Contractor produced salvaged bituminous material, ordered by the Engineer, which contains excessive oversized material due to the Contractors production methods, will not be measured for payment.

307.05 – Basis of Payment

1. Pay Item	Pay Unit
Aggregate Foundation Course ____	Square Yard (SY) [Square Meter (m ²)]
Bituminous Foundation Course ____	Square Yard (SY) [Square Meter (m ²)]
Crushed Concrete Foundation Course ____	Square Yard (SY) [Square Meter (m ²)]
Foundation Course ____	Square Yard (SY) [Square Meter (m ²)]

2. a. If a foundation course is $\frac{1}{2}$ to 1 inch (12mm to 25mm) less than the specified thickness, it shall be removed and replaced; or, at the Engineer's option, the material may be left in place and paid for at 40% of the bid price for the deficient areas. The area of the deficient section shall be determined by the Engineer.
 - b. Foundation course more than 1 inch (25mm) less than the specified thickness shall be removed and replaced at no additional cost to the Department. The extent of the area to be corrected will be determined by the Engineer.
3. All water applied to foundation course will not be measured for payment, but will be considered subsidiary to the relevant foundation course bid item.
4. Screening of salvaged bituminous material shall be considered subsidiary to the bituminous foundation course item.
5. Processing of salvaged bituminous material, ordered by the Engineer, which contains excessive oversized material due to the Contractors production methods, shall be considered subsidiary to the bituminous foundation course item.
6. If the Contractor is required to reprocess the oversized bituminous material from State stockpiles, the work of reprocessing will be paid for as Extra Work as described in Paragraph 5. of Subsection 104.02.
7. Payment is full compensation for all work described in this Section.

FOUNDATION COURSE 6"

The Contractor shall have the option of using either Aggregate Foundation Course-D, Crushed Concrete Foundation Course or Bituminous Foundation Course; and the Contractor shall bid the pay item "Foundation Course ____" accordingly.

These different foundation courses may be used interchangeably throughout the project, with the exception being that the same type of foundation course shall be used across the entire width of a pavement section to provide uniform drainage across that template. The Contractor shall make every attempt to use the same type of foundation course in long paving runs and any changes in foundation course type shall be approved by the Engineer.

Regardless of the type of material used it shall be obtained from Contractor sources, the cold milling operations, or pavement removal operation on the project.

Regardless of the type of material used it shall be measured and paid for by the square yard as "Foundation Course ____".

FOUNDATION COURSE (Light Weight Deflectometer)

Equipment

A minimum of one self-propelled double drum vibratory roller shall be required. The vibratory roller shall have a minimum operating weight of 18,000 pounds.

Compaction and Stiffness

The Department shall monitor the in-place stiffness by measuring the deflection of the foundation course by using a control strip by performing Light Weight Deflectometer measurements of the foundation course for acceptance. Refer to NDOT Test Method T 2835 for the proper operation of the Light Weight Deflectometer (LWD). The procedure for conducting Lightweight Deflectometer testing is as follows:

1. The deflection test is defined as the average of the fourth, fifth, and sixth drops of the deflectometer at one location.
2. The deflection value is defined as the average of 3 test locations.
3. The Deflection Target Value (DTV) is the lowest deflection value determined by using a control strip.
4. A single coverage is defined as the compacting of unbound material over a given point a single time.
5. A new control strip shall be constructed when there is an observed change in material or as determined by the Engineer.

A Control Strip shall be constructed for the purpose of determining the Deflection Target Value.

6. The control strip dimensions for roadway shall have a minimum length of 200 feet.
7. The control strip area construction shall be incidental to the pay item Foundation Course____.
8. During construction of the control strips, the Contractor shall make repeated compaction coverages. When the material is visibly densified, the Engineer will take deflection tests at 3 locations to get an average deflection value. Following each test, additional coverages shall be conducted and deflection tests taken until a Deflection Target Value is established.
9. The Deflection Target Value of the control strip shall be determined by compacting the foundation course to a point that three consecutive coverages do not change the deflection by more than 10%. The DTV shall be based on the lowest average deflection test. The roller procedure shall have a minimum of 6 consecutive coverages unless an alternate rolling pattern is approved by the Engineer.

10. The Deflection Target Value shall be re-evaluated when:
 - i. Deflection test measurements are consistently less than the DTV. (3 out of 5 consecutive deflection tests are less than 0.8 of the DTV).
 - ii. Failing test results are consistently occurring and adequate compaction is observed.

Acceptance Testing

A passing deflection test is defined as a deflection value that is less than $1.10 \times \text{DTV}$. The frequency of testing deflection is 1 test at one location for every 1500 square yards or less.

WORK ZONE TRAFFIC CONTROL SIGNS (4-3-1217)

The Department has adopted the FHWA 2009 Manual of Uniform Traffic Control (MUTCD) and the 2011 Nebraska Supplement to the MUTCD as the official guidance for work zone traffic control signs. Many work zone traffic control signs have been revised, redesigned, or replaced in the 2009 MUTCD (and 2011 Nebraska Supplement). Accordingly, all work zone signs shall comply with the following:

- 1 - All signs, regardless of age, shall meet the design standards of the 2009 MUTCD (and 2011 Nebraska Supplement).

TEMPORARY TRAFFIC CONTROL SIGNS AND DEVICES (4-3-1018)

Paragraph 19. of Subsection 422.04 in the Standard Specifications is void.

WET REFLECTIVE POLYUREA PAVEMENT MARKING, GROOVED (4-8-1217)

I. Description

This work shall consist of furnishing and installing wet night retroreflective polyurea pavement markings in accordance with this provision and in conformance to the dimensions and lines shown on the plans or established by the Engineer.

The wet reflective polyurea marking material shall be applied by spray method onto asphaltic cement concrete and Portland cement concrete surfaces. Following an application of glass beads or black aggregate, and upon curing, the resulting marking shall be an adherent reflectorized stripe of the specified thickness and width that is capable of resisting deformation by traffic.

The Contractor shall field verify the pavement marking quantities required for the project prior to purchasing materials. The Department will not be held responsible for the Contractor's shortage or surplus of material. The Contractor's verification of quantities and purchasing material shall not delay the project or the installation of pavement marking when required.

The polyurea pavement marking shall be applied in grooves cut into the surfacing. The grooves shall be made in a single pass dry cut; the equipment used shall be self-vacuuming and leave the cut groove ready for polyurea pavement marking application. The equipment and method used shall be approved by the polyurea pavement marking manufacturer. The polyurea pavement marking shall be applied in the grooves the same day as the cut. Grooves shall be clean and dry prior to polyurea pavement marking application. All conflicting pavement markings which remain after application of the polyurea pavement markings shall be removed. The removal of conflicting, pre-existing temporary or permanent pavement marking shall be paid for with the appropriate removal pay item. The removal of conflicting temporary or permanent pavement marking placed as part of this work shall be at no cost to the Department.

Groove width: pavement marking width + 1 inch to 2 inch maximum
 Groove depth: per manufacturer's recommendations to a minimum of 60 mils
 Groove length: full length of marking + required grooving transition
 Groove position: 2 inches off of joint line (per plan)

Grooving of the surfacing shall be performed in accordance with the polyurea manufacturer's recommendations. Grooving the surfacing shall not be measured and paid for but shall be considered subsidiary to "____ Polyurea Pavement Marking, Grooved".

II. Materials

A. Polyurea

Composition Requirements:

Composition requirements are per manufacturer's specifications. The Polyurea Pavement Markings approved for use are shown on the NDOT Approved Products List. Markings which have not been previously approved by the Department will not be permitted on the project until approved by the Traffic Engineer.

Properties:

1. **Color and Weathering Resistance:** The mixed polyurea compound, white, yellow and black, when applied to a 3" x 6" aluminum panels at 15±1 mil in thickness with no glass beads or elements and exposed for 500 hours in a Q.U.V. Environmental Testing Chamber, as described in ASTM-G154, Cycle #1, shall conform to the following minimum requirements. The color of the white polyurea system shall not be darker than Federal Standard No. 595A-17778. The color of the yellow polyurea system shall conform to Federal Standard No. 595A-13538. The color of the black polyurea system shall conform to Federal Standard No. 595A-17038.

2. Track-Free Time (Laboratory): When tested in accordance with ASTM D 711, the polyurea marking material shall reach a track-free condition in 10 minutes or less for a 15 mil thickness. This test shall be performed with AASHTO Type 1 beads coated at a rate of 0.099 pounds per square foot. The track-free time shall not increase substantially with decreasing temperature.
3. Adhesion to Concrete: The polyurea coating, when tested according to ACI Method 503, shall have such a high degree of adhesion to the specified concrete surface that there shall be a 100% concrete failure in the performance of this test. The prepared specimens shall be conditioned at room temperature ($75^{\circ} \pm 2^{\circ}$ F) for a minimum of 24 hours and maximum of 72 hours prior to the performance of the tests indicated.
4. Adhesion to Asphalt: The polyurea coating, when tested according to ACI Method 503, shall have such a high degree of adhesion to the specified asphalt surface that there shall be a 100% asphalt failure in the performance of this test. The prepared specimens shall be conditioned at room temperature ($75^{\circ} \pm 2^{\circ}$ F) for a minimum of 24 hours and maximum of 72 hours prior to the performance of the tests indicated.

B. Reflective Media

The reflective media application shall incorporate a double drop technique to maximize wet night reflectivity and color. The reflective media used shall ensure the wet reflective polyurea pavement markings meet the retroreflectance performance requirements in Section II.D.3. The glass beads for drop-on application shall conform to the following requirements *or be an approved equivalent*.

1. Glass Beads

The required glass beads shall be a 60/40 blend (60% sinkers and 40% floaters) of AASHTO M 247-81 Type I gradation 1.5 index glass beads. The glass beads shall have a minimum of 70% Rounds as measured according to ASTM D1155. Crush Resistance shall be measured according to the procedures of ASTM D1213 and shall be a minimum of 30 pounds retained on US #40 Mesh.

Acid Resistance: A sample of glass beads supplied by the manufacturer shall show resistance to corrosion of their surface after exposure to a 1% solution (by weight) of sulfuric acid. The 1% acid solution shall be made by adding 5.7 cc of concentrated acid into 1000 cc of distilled water. CAUTION: Always add the concentrated acid into the water, not the reverse. The test shall be performed as follows:

Take a 1" x 2" sample, adhere it to the bottom of a glass tray and place just enough acid solution to completely immerse the sample. Cover the tray with a piece of glass to prevent evaporation and allow the sample to be exposed for 24 hours under these conditions. Then decant the acid solution (do not rinse, touch, or

otherwise disturb the bead surfaces) and dry the sample while adhered to the glass tray in a 150° F (66° C) oven for approximately 15 minutes. Microscopic examination (20X) shall show not more than 15% of the beads having a formation of very distinct opaque white (corroded) layer on their entire surface.

2. Wet Reflective Media

Wet Reflective Media shall be approved for use by the polyurea manufacturer. The Wet Reflective Media approved for use are shown in the NDOT Approved Products List.

C. Non-Reflective Media

Black aggregate shall be broadcast to saturation on all black lines to provide a matte, non-reflective finish. The black aggregate shall be either a fine or medium gradation.

D. Finished Markings

Because of normal variances in road surfaces, application processes and measurement, the properties of markings made from the materials specified herein will vary from one installation to the next. When the materials are applied according to the specifications in Section III, they shall be capable of forming markings with the following reproducibility of properties:

1. On-the-road Track-Free Time: When installed at 77° F and at a wet film thickness of 15±1 mils, the markings shall reach a no-track condition in less than 10 minutes. Track-free shall be considered as the condition where no visual deposition of the polyurea marking to the pavement surface is observed when viewed from a distance of 50 feet, after a free-rolling traveling vehicle's tires have passed over the line. The track-free time shall not increase substantially with decreasing temperature.
2. Skid Resistance: The average initial skid resistance shall be 45 BPN or greater when tested according to ASTM E303.
3. Retroreflectance – Required initial retroreflectance values are shown in the table below. Typical retroreflectivity is determined as the average of many readings (mcd(ft-2)(fc-1)) metric equivalent (mcd(m-2)(lux-1)) as described below.

Average Minimum Initial Retroreflectance		
	White	Yellow
Dry (ASTM E1710)	500	350
Wet Recovery (ASTM E2177)	350	275
Wet Continuous (ASTM E2832)	100	75

- 3.1.1 Some reasonable variance should be expected (for example, application on very rough road surfaces or differences in glass beads).

- 3.1.2 The initial retroreflectance value of a single installation or unit of work shall be the average value determined according to the measurement and sampling procedures outlined in ASTM D7585, using a 30-meter (98.4 feet) retroreflectometer, except as modified below. The 30-meter retroreflectometer shall measure the coefficient of retroreflected luminance, R_L at an observation angle of 1.05 degrees and an entrance angle of 88.76 degrees. R_L shall be expressed in units of millicandelas per square foot per foot-candle [$\text{mcd}(\text{ft}^{-2})(\text{fc}^{-1})$]. The metric equivalent shall be expressed in units of millicandelas per square meter per lux [$\text{mcd}(\text{m}^{-2})(\text{lux}^{-1})$].
- 3.1.3 The initial retroreflectance values of the pavement marking shall be measured no sooner than 48 hours after application, but not later than 30 days after application. The Contractor shall provide an acceptable 30-meter retroreflectometer to use on the project (the retroreflectometer will remain the property of the Contractor). The contractor will take measurements in the presence of the Engineer. Prior to taking measurements, the Contractor shall calibrate the retroreflectometer according to the manufacturer's requirements.

Measurements will be taken at equally spaced (or nearly so) test areas located by the Engineer in each evaluation section. An evaluation section is defined as a 3 mile (or major fraction) portion of a segment. If the last evaluation section is less than 1.5 miles in length, it shall be combined with the preceding section.

The test areas shall be at least 400 ft. in length and a minimum of 10 readings shall be taken over the length of each test area.

All measurements shall be made in the direction of travel. On centerlines of undivided highways, measurements shall be taken in both directions in each test area and averaged to determine the value of that color line in that test area.

Measurements shall be taken for each type and color of line in the evaluation section.

Individual symbols and legends will be treated as separate evaluation sections. Three (3) readings shall be taken on each symbol to determine the average retroreflectance value for the symbol.

The Department will do verification testing. When the average of the readings for an evaluation section fall below the minimum, the entire section represented by those readings will be further evaluated by the Engineer and may be subject to removal and replacement.

- 3.1.4 The Department may elect to determine wet retroreflectance values measured under a “condition of continuous wetting” (simulated rain) in accordance with ASTM E2832. To reduce variability between measurements, the test method shall be performed in a controlled laboratory environment while the marking is positioned with a 3 to 5 degree lateral slope. Measurements shall be reported as the average of the minimum of three locations. Samples of the completed finished product shall be applied to flat panels during application and brought back to the lab for testing. When such samples are taken, the Department will furnish the panels.

III. Application

The Contractor shall furnish equipment and apply the materials according to the following specifications:

A. Equipment:

Application equipment shall be capable of producing markings that meet the specifications of the manufacturers listed on the NDOT Approved Products List for Polyurea Pavement Marking.

At any time throughout the duration of the project, the Contractor shall provide free access to his application equipment for inspection by the Engineer, his authorized representative or a materials representative.

When black and white polyurea are applied together to create a contrast pattern, they shall be applied from one truck in a single pass operation.

B. Application Conditions:

1. **Moisture:** The markings shall only be applied during conditions of dry weather and when the pavement surface is dry and free of moisture.
2. **Air Temperature:** The markings shall only be applied when road and air temperatures are above 40 degrees F, unless manufacturer’s guidelines state otherwise.
3. **Surface Preparation:** Marking operations shall not begin until applicable surface preparation work is completed and approved by the Engineer.
 - 3.1 Prior to applying the markings, the Contractor shall remove any remaining existing markings to expose a minimum of 80% of the pavement surface.
 - 3.2 Prior to applying the markings, the Contractor shall remove all curing compounds on new Portland cement concrete surfaces.
 - 3.3 Prior to applying the markings, the Contractor shall remove all dirt, sand, dust, oil, grease and any other contaminants from the road surface.
 - 3.4 Application over temporary paint is not acceptable.

4. **Dimensions:** The pavement markings shall be placed only on properly prepared surfaces and at the widths and patterns as designated in the contract. The markings shall be applied in accordance with the "Manual on Uniform Traffic Control Devices" and in accordance with the Engineer's plans.

Any markings that are found to be 0.5 inches less than the width shown in the plans shall be removed and replaced by the Contractor.

5. **Other Restrictions:** The Engineer and/or Contractor shall determine further restrictions and requirements of weather and pavement conditions necessary to meet the all other application specifications and produce markings that perform to the satisfaction of the Engineer.
6. **Binder Thickness:** The polyurea binder (mixed Part A and Part B) coating shall be applied at rates to achieve minimum uniform wet thicknesses as follows:

Surface Type	Recommended Polyurea Pavement Marking Thickness (1 inch=1000 mils)
Existing Smooth Asphalt or Concrete Surface	20±2 mils
New Concrete Surface ¹	20±2 mils
New Asphalt Surface (Standard Asphalt Mix)	20±2 mils
Open Grade Friction Course (OGFC) or Stone Matrix Asphalt (SMA) ²	25±2 mils
Rough Concrete or Asphalt	22±2 mils
Concrete or Asphalt after Grinding Off Pavement Markings ³	22±2 mils

¹ Use thicker binder (20 mils) on new concrete surfaces with heavy tines.

² Very large aggregate sizes for open grade friction course or stone matrix asphalt mixes may require a thickness of 25 mils for proper coverage.

³ Pavement marking thickness determined by the type of surface and roughness/texture created from grinding operation.

7. **Reflective Media Application:** The Contractor shall ensure that the reflective media are properly set in the polyurea coating so that their exposed portions are free of polyurea coating material. The specified reflective media shall be dropped per the manufacturer's specified rates to achieve their recommended coating weights.

8. **Volumetric Proportioning:** The Contractor shall ensure proper proportioning as required by manufacturer's specifications and mixing of the polyurea components so that the markings are adequately hardened throughout and are free of soft or uncured material. Typically, such areas will darken over time from dirt and tire residue.
9. **Overspray:** The Contractor shall ensure the polyurea coating does not exhibit excessive overspray.
10. **Adhesion:** The Contractor shall ensure that the polyurea coating is well adhered to the road surface, and that the reflective media are well adhered to the binder.

IV. Observation Period

Following initial completion of all pavement marking, there will be a 180-day observation period before final acceptance. During the observation period, the Contractor, at no expense to the Department of Transportation, shall replace any marking that the Engineer determines are not performing satisfactorily due to defective materials and/or workmanship in manufacture and/or application. At the end of the observation period the minimum required retention percentage for marking installed shall be 90%.

Determination of Percentage Retained - The percentage retained shall be calculated as the nominal area of the strip less the area of loss divided by the nominal area and expressed as a percentage of the nominal area. A claim, made by the State against the Contractor, shall be submitted to the Contractor in writing within 30 days after the 180-day observation period. When such a claim is made prior to August 1, the replacement material shall be installed during that same construction season. Replacement material for any claim after August 1, shall be installed prior to June 1, of the following year. Marking replacement shall be performed in accordance with requirement specified herein for the initial application, including but not limited to surface cleaning, sealer application, etc.

Final acceptance of all marking will include an inspection of the appearance of the markings during daylight and darkness. Any markings that fail to have a satisfactory appearance during either period, as determined by the Engineer, shall be reapplied at no expense to the Department of Transportation.

Final acceptance of the pavement marking will be: (1) 180 days after the initial completion of all work, or (2) upon completion of all corrective work, whichever occurs last.

V. Contract Units and Basis for Payment

- A. Linear pavement markings will be measured in linear feet complete-in-place for the width specified.
- B. Arrows and Legends are measured by the each.

Subsection 423.05 of the Standard Specifications is amended to include the item: " Polyurea Pavement Marking, Grooved". Payment shall be full compensation for

grooving the pavement surface, furnishing and applying all markings, and for all materials, labor, tools, equipment and incidentals necessary to complete the work.

Payment will be made under:

Pay Item	Pay Unit
____ Polyurea Pavement Marking, Grooved	Linear Feet
____ Polyurea Pavement Marking, Grooved	Each

Payment is full compensation for all work prescribed in this Section.

CHANNELIZING BLOCK

This work shall consist of the contractor furnishing, installing, maintaining, and removing reflectorizing channelizing blocks.

The channelizing block shall consist of a Yellow housing with 2 reflectors on each side. The housing size is approximately 2 ½" x 13" x 7 ½" (63 mm x 330 mm x 19mm).

Each reflector will be approximately 2.4 sq. inches in reflective area. (15 sq cm) The channelizing block shall be installed inline with the tubular posts and raised pavement markers as shown in the plans.

Approved channelizing block manufactures are shown on the NDOT Approved Products List. The channelizing block shall be installed as per manufacturer recommendations.

Channelizing blocks, which have become dislodged from position due to traffic or other action, shall be properly repositioned and reattached within 24 hours. Channelizing blocks which cannot be cleaned or which are broken shall be replaced.

The work will be measured for payment on an individual unit basis for each channelizing block initially installed. No direct payment will be made for channelizing blocks repositioned and/or reattached or replaced. Payment will be made at the contract unit price per each for the items, "Channelizing Block". This price shall be full compensation, for installing channelizing blocks, for maintaining channelizing blocks in position, for replacing channelizing blocks, and for removing channelizing blocks upon completion of the work, and for all equipment, labor, tools, materials, and incidentals necessary to complete the work.

REMOVABLE WET REFLECTIVE TAPE, TYPE 4

I. Description

This work shall consist of furnishing and installing retroreflective preformed patterned pavement markings in accordance with this provision and in reasonably close conformance to the dimensions and lines shown on the plans and/or required by the engineer.

II. Materials - General

The preformed patterned markings shall consist of white or yellow films with clear microcrystalline ceramic beads incorporated to provide immediate and continuing retroreflection during both wet and dry conditions. This film shall be manufactured without the use of lead chromate pigments or other similar, lead-containing chemicals.

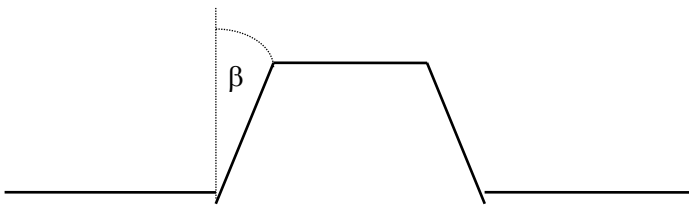
The quality of the pavement marking shall be such that the performance requirements for the marking shall be met. The markings shall be precoated with a pressure sensitive adhesive and shall be capable of being adhered to Asphalt concrete or Portland cement concrete at temperatures as low as 50°F (10°C) in accordance with the manufacturer's recommendations. When stored in a cool dry area indoors, the materials shall be suitable for use for one year after the date of purchase.

III. Classification

The removable retroreflective pavement marking tape must be designed and constructed in such a manner that it can be readily removed when the markings are no longer applicable. The tape shall be capable of performing for the duration of a normal construction season and shall then be capable of being removed intact or in large pieces. The tape shall be wet and dry reflective throughout its useful life. (A normal construction season is defined as the time after the last snowplowing in the spring and before the first snowplowing in the fall/winter.)

IV. Composition and Retroreflectivity Requirements

Composition: The retroreflective pliant polymer pavement markings shall consist of a mixture of high-quality polymeric materials, pigments and glass beads distributed throughout its base cross-sectional area, with a reflective layer of microcrystalline ceramic beads bonded to a durable polyurethane topcoat surface. The patterned surface shall have approximately $20\% \pm 10\%$ of the surface area raised and presenting a near vertical face (β angle of 0° to 60°) to traffic from any direction. (See diagram below.) The channels between the raised areas shall be substantially free of exposed beads or particles.



Retroreflectance: The white and yellow markings shall have the initial expected retroreflectance values as shown in Table 1 under dry, wet, and rainy conditions. The photometric quantity to be measured shall be coefficient of retroreflected luminance (R_L) and shall be expressed as millicandelas per square foot per foot-candle $[(\text{mcd} \cdot \text{ft}^{-2}) \cdot \text{fc}^{-1}]$. The metric equivalent shall be expressed as millicandelas per square meter per lux $[(\text{mcd} \cdot \text{m}^{-2}) \cdot \text{lx}^{-1}]$.

Retroreflectance values shall be measured under dry conditions in accordance with the testing procedures of ASTM D4061.

Retroreflectance values shall be measured under wet conditions in accordance with ASTM E2176 or ASTM E2177. Wet retroreflectance values measured under a “condition of continuous wetting” (simulated rain) shall be in accordance with ASTM E2176, and to reduce variability between measurements, test method shall be performed in controlled laboratory environment while the marking is positioned with a 3 to 5 degree lateral slope. A wetting agent shall be used to improve wetting of the pavement marking by the water. It is recommended that a 0.1% by volume liquid soap solution be used. Measurements shall be reported as an average for each roll tested, in a minimum of three locations.

Wet retroreflectance values measured under a “condition of wetness” shall be in accordance with ASTM E2177, and the test may be performed with the marking installed on the road. New markings shall be tested using a wetting agent, as previously described. Laboratory measurements shall be performed using a 3 to 5 degree lateral slope. Measurements shall be reported as an average for each roll tested, in a minimum of three locations

Table 1
Expected Initial R_L under dry, wet, and rainy conditions

White	Dry	Wet & Rainy
Entrance Angle	88.76°	88.76°
Observation Angle	1.05°	1.05°
Retroreflected Luminance $R_L [(mcd \cdot m^{-2}) \cdot lx^{-1}]$	500	250

Yellow	Dry	Wet & Rainy
Entrance Angle	88.76°	88.76°
Observation Angle	1.05°	1.05°
Retroreflected Luminance $R_L [(mcd \cdot m^{-2}) \cdot lx^{-1}]$	300	200

Note: The test instrument shall use an Entrance Angle of 88.76° and Observation Angle of 1.05° which represents a simulated driver viewing geometry at a 30 meter distance.

Beads: Index of Refraction: All “dry-performing” microcrystalline ceramic beads bonded to the polyurethane-coated, patterned surface of the material shall have a minimum index of refraction of 1.70 when tested using the liquid oil immersion method. All “wet-performing” microcrystalline ceramic beads bonded to the polyurethane-coated, patterned surface of the material shall have a minimum index of refraction of 2.30 when tested using the liquid oil immersion method. The glass beads mixed into the pliant polymer shall have a minimum index of refraction of 1.5 when tested by the liquid oil immersion method.

Testing Procedure For Refractive Index of Beads By Liquid Immersion

Equipment Required:

1. Microscope (minimum 100X magnification)

2. Light source - preferably sodium light or other monochromatic source, but not absolutely essential
3. Refractive index liquids
4. Microscope slide and slide cover
5. Mortar and pestle

Procedure:

1. Using the mortar and pestle, crush a few representative beads and place a few of these crushed particles on a microscope slide.
2. Place a drop of a refractive index liquid, with an index as close to that of the glass as can be estimated, on the particles.
3. Cover the slide with a microscope slide cover and view the crushed particles by transmitted light normal to the slide surface (illuminated from the bottom).
4. Adjust the microscope mirror to allow a minimum light intensity for viewing. This is particularly important if sodium light is not used.
5. Bring a relatively flat and transparent particle into focus.
6. By slightly raising and lowering the objective (microscope tube), look for one or both of the following:
 - a. Becke Line - This light line will appear to move either into the particle or away from it. In general, if the objective is raised, the line will move toward the material of higher refractive index; if the objective is lowered, the line will move toward the material of lower index.
 - b. Variation in Particle Brightness - When raising the object from a sharp focus, the particle will appear to get brighter or darker than the surrounding field. If it becomes brighter, the glass has a higher refractive index than the liquid. If it becomes darker, the glass has a lower refractive index than the liquid. In both cases, the opposite will be true if the object is lowered.
7. This test can be used to confirm that the beads are above or below a specified index. It can also be used to give an accurate determination of the index (± 0.001). This is done by using several refractive index liquids until a match or near match of indices occurs. The index of the glass will equal that of the liquid when no Becke line and no variation in bead brightness can be observed.

The size and quality of the beads shall be such that the performance requirements for the retroreflective pliant polymer shall be met.

Acid Resistance: The beads shall show resistance to corrosion of their surface after exposure to a 1% solution (by weight) of sulfuric acid. The 1% acid solution shall be

made by adding 5.7cc of concentrated acid into 1000cc of distilled water. CAUTION: Always add the concentrated acid into the water, not the reverse. The test shall be performed as follows:

Take a 1-inch x 2-inch sample, adhere it to the bottom of a glass tray and place just enough acid solution to completely immerse the sample. Cover the tray with a piece of glass to prevent evaporation and allow the sample to be exposed for 24 hours under these conditions. Then decant the acid solution (do not rinse, touch or otherwise disturb the bead surfaces) and dry the sample while adhered to the glass tray in a 150° F. (66° C.) oven for approximately 15 minutes.

Microscopic examination (20X) shall show no more than 15% of the beads having a formation of a very distinct opaque white (corroded) layer on their entire surface.

Color: The preformed markings shall consist of white film with pigments selected and blended to conform to standard highway colors.

Removability: The pavement markings shall be removable from Asphalt concrete and Portland cement concrete intact or in large pieces, at temperatures above freezing without the use of heat, solvents, grinding or blasting without permanently scarring the roadway surface.

Skid Resistance: The patterned surface of the retroreflective pliant polymer shall provide an initial average skid resistance value upon manufacturing of 45 BPN when tested according to ASTM E303 except values shall be taken in one direction and then at a 45° angle from that direction. These two values shall then be averaged to find the skid resistance of the patterned surface.

Patchability: The pavement marking material shall be capable of use for patching worn areas of the same type in accordance with manufacturer's instructions.

Thickness: The patterned material without adhesive shall have a minimum caliper of 0.075 inches (1.651mm) at the thickest portion of the patterned cross-section and a minimum caliper of 0.020 inches (.508mm) at the thinnest portion of the cross-section.



V. Installation

The markings shall be applied in accordance with the manufacturer's installation instructions. Marking configurations shall be in accordance with the "Manual on Uniform Traffic Control Devices." Tape shall not be installed unless the surface and air temperatures are in compliance with the manufacturer's specifications. Pavement markings shall be applied to clean, dry surfaces in accordance with the manufacturer's installation instructions or a method approved by the Engineer.

The Contractor shall have on the project at all times during the application of the removable pavement markings at least one employee with a valid American Traffic Safety Services Association (ATSSA) certification. The ATSSA certification may be for

either a "Certified Pavement Marking Technician" or a "Certified Pavement Marking Specialist." The Contractor shall provide the Engineer a copy of the employee's certification prior to the beginning of work.

VI. Observation

During the project phase the markings are intended for, the contractor, at no expense to the Department of Transportation, shall replace any markings that the Engineer determines are not performing satisfactorily due to defective materials and/or workmanship in manufacture and/or application. The installation of all markings will include an inspection of the appearance of the markings during daylight and darkness. Any markings that fail to have a satisfactory appearance during either period, as determined by the Engineer, shall be reapplied at no expense to the Department of Transportation.

VII. Removal

Upon completion of the project or phase, the contractor shall remove the tape in whole. The removal procedure shall not damage the roadway surface.

VIII. Contract Units And Basis For Payment

Subsection 424.01 of the Standard Specifications is amended to include the item: "Removable Wet Reflective Tape, Type 4". The price shall be full compensation for furnishing, installing, and removing all markings, and for all materials (including adhesive), labor, tools, equipment and incidentals necessary to complete the work.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
____ Removable Wet Reflective Tape, Type 4	Linear Foot

TUBULAR POST CURB SYSTEM

- a. The Contractor shall furnish, install, maintain, and remove reflectorized tubular post curb systems at the locations shown in the plans or as directed by the Engineer.
- b.
 - (1) The height of a tubular post shall be 36 inches (915 mm). The material from which the post and curb are fabricated shall be rubber, plastic, or any other material, which is NCHRP-350, approved. The minimum width of the post shall be 2 inches (50 mm). The predominant color of the post shall be yellow (or as required by the project plans).
 - (2) Each complete tubular post and each replacement post must have a minimum of two 3-inch (75 mm) wide reflective yellow bands placed a maximum of 2 inches (50 mm) from the top with a maximum of 6 inches (150 mm) between the bands. (The color of the posts and reflective bands may be different - as required by the project plans.)

- (3) Each curb section must contain at least one yellow retroreflective marker facing each direction of traffic. (Unless shown otherwise on the plans.)
 - (4) The curb sections must be configured to allow for drainage from the pavement surface.
 - (5) Tubular post curb systems that are approved for use are shown in the NDOT Approved Products List. Systems which have not been previously approved by the Department will not be permitted on the project until approved by the Engineer.
- c.
- (1) The tubular post curb systems shall be spaced at the intervals shown in the plans or as directed by the Engineer. They shall be attached to the existing surface by anchor bolt or other suitable method as directed by the manufacturer. They must be attached in such a way that they have the ability to be relocated. The initial placement and/or replacement of the tubular post curb system shall be performed with extreme care and consideration for the traveling public.
 - (2) Reflective sheeting, which is no longer effective, shall be replaced.
 - (3) Tubular post curb systems, which have become dislodged due to traffic or other action, shall be properly repositioned and reattached within 24 hours. Tubular post curb systems which cannot be cleaned or which are broken shall be replaced.
- d.
- Upon completion of that particular phase of the work requiring tubular post curb system delineation, the Contractor shall remove the curb systems as directed by the Engineer. The Contractor shall exercise care and consideration for traffic control during removal, initial installation, and replacement. The Contractor must explain this phase of traffic control to the Engineer before installation, replacement, and removal.

Subsection 422.03 of the Standard Specifications is amended to include the following item: "Tubular Post Curb System". This price shall be full compensation for all labor, equipment, tools, materials, and incidentals required to complete the work.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
Tubular Post Curb System	Linear Ft

COLD MILLING CLASS 4

Paragraph 8.a. of Subsection 510.04 of the Standard Specifications is void and superseded by the following:

Remaining salvaged bituminous material produced from the cold milling operation not used in the production of asphaltic concrete shall become the property of the Contractor and removed from the project.

**ELECTRONIC VIBRATOR MONITORING
(6-10-0718-A)**

Paragraph 9. of Subsection 601.02 is amended to include the following:

- e. For slip-form construction, an electronic monitoring device displaying the operating frequency of each individual internal vibrator shall be required for the construction of mainline pavement exceeding 600 feet in length.
 - (1) The monitoring device shall have a readout display near the operator's controls visible to the paver operator and to the Engineer.
 - (2) It shall operate continuously while paving, and shall display all vibrator frequencies with manual or automatic sequencing among all individual vibrators.
- f.
 - (1) Each vibrator monitor shall be routinely checked for functionality and adequate frequency no less than once an hour or 300 feet of paving, whichever is more frequent.
 - (2) If a vibrator monitor fails to function properly, a hand held device may be used until the monitor is repaired. The Contractor shall measure and record the vibrations of each vibrator at least once an hour.
- g.
 - (1) For projects having 50,000 or more square yards of mainline pavement, the electronic monitoring device shall record the following information:
 - i. the clock time
 - ii. station location
 - iii. paver track speed
 - iv. operating frequency of individual vibrators
 - (2) These recorded values shall be made after each 25 feet of paving or after each 5 minutes of time, whichever is more frequent.
 - (3) These recorded values shall be provided to the Engineer at the end of each day's placement on paper or in an electronic format suitable to the Engineer.

**CONCRETE PAVEMENT
(Compressive Strength of Cores)
(6-10-1018)**

Paragraph 4.a.(3) of Subsection 603.05 in the Standard Specifications is void and superseded by the following:

- (3) The results of the additional two cores taken by the Contractor will be averaged for the final compressive strength calculation and pay factor.

SEALING JOINTS

Paragraph 1. of Subsection 612.02 is void and superseded by the following:

1. The joints shall be sealed with joint sealing filler, which conforms to the requirements of Section 1014.

Paragraphs 2.a. and b. of Subsection 612.03 are void and superseded by the following:

- a. The Contractor shall furnish the Engineer, the manufacturer's recommendations for mixing, application, and temperature restrictions of the sealer 7 days prior to work beginning. These recommendations shall be strictly followed. If hot pour sealer is used, in no case shall the temperature exceed the maximum heating temperature recommended by the manufacturer, nor shall the temperature fall below the minimum application temperature recommended by the manufacturer, during the application process.
- b. The joints shall be filled full depth as shown in the contract to 1/4-inch to 5/8-inch (3 mm to 6 mm) below the pavement surface. If hot pour type sealer is used, the application can begin when the minimum application temperature is attained. The joints shall be filled as shown in the contract through the use of a pressure type applicator equipped with a nozzle which will fit into the joints.

Paragraphs 2.a., b., and c. of Subsection 612.05 are void and superseded by the following:

- a. When test results of on-site sealant materials are outside of the specified property ranges, joint sealing shall be paid for at the contract unit price multiplied by the Pay Factors in Table 612.01.

Table 612.01

Pay Factor	Specified Property
1.00	Deviation of up to (+/-) 5.0%
0.95	Deviation of (+/-) 5.1% to 10.0%
0.90	Deviation of (+/-) 10.1% to 15.0%
0.80	Deviation of (+/-) 15.1% to 20.0%
0.70	Deviation of (+/-) 20.1% to 25.0%
0.40 or Reject	Deviation of 25.1% or greater

- (1) When the specification requirement is stated as a percentage, the test result deviation from the specification will be divided by the specification value. The resulting deviation percentage is then applied to the above Table.
 - (2) When more than one specified property exceeds specification tolerances, the single largest Pay Factor reduction will be the one applied.
 - (3) Material not meeting a Pass/Fail requirement falls under the Pay Factor of 0.40 or Reject.
- b. If the material is found to be out of specification, the material shall be rejected if not already used. All material out of specification, regardless of Pay Factor, not in place, will be rejected and shall be removed from the site.
 - c. If the Pay Factor is less than 1.00, and the material has been incorporated in work, which is allowed to remain in place, the Pay Factor for the material is determined by Table 612.01.

Paragraph 3.a. of Subsection 612.05 is void and superseded by the following:

- a. Only the Contractor can initiate dispute resolution, and request referee testing. Should the Contractor request referee testing, it shall be submitted in writing to the Department within 30 days of receiving the notification of deficiency.

SEEDING

Subsection 801.02 in the Standard Specifications is amended to include the following:

Type "B"	Minimum Purity (%)	Broadcast Application Rate in lb. of Pure Live Seed/Acre	Approved Mech. Drill Application Rate in lb. of Pure Live Seed/Acre
Perennial ryegrass – Linn, Norlea, Amazon	85		18
Western wheatgrass – Flintlock, Barton	85		6
Slender wheatgrass	85		12
Kentucky fescue	85		18
Red fescue (<i>Festuca rubra</i>)	85		6
Inland saltgrass (<i>Distichlis spicata</i>)	70		0.75
Blue grama – NE, KS, CO, MN, SD	30		3
Buffalograss – Bison, Cody, Sundancer, Texoka	80		4.5
Sideoats grama – Butte, Trailway	75		4
Sand lovegrass – Nebraska-27, native **	90		0.5
Sand dropseed (<i>Sporobolus cryptandrus</i>)	90		0.4
Oats/wheat (Wheat in the fall)	90		16

All seed shall be origin Nebraska, adjoining states, or as specified. A Contractor proposing to use a substitute variety, or origin shall submit for the Engineer's consideration a seed tag representing the seed which shows the variety, origin and analysis of the seed.

Rates of application of commercial inorganic fertilizer shall be:

	Rate of Application Per Acre (Minimum)
Available Nitrogen (N2) -----	32 or 36 lb.
Available Phosphoric Acid (P2O5) -----	92 or 96 lb.

Rate of application of granular sulphur coated urea fertilizer shall be:

Nitrogen (total available) -----	0 lb.
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The Contractor may, at his option, apply granular urea formaldehyde in lieu of the sulphur coated urea fertilizer at the following rate:

Nitrogen (total available) -----	0 lb.
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Paragraph 4.a. of Subsection 801.03 is void and superseded by the following:

- a. Seeding operations shall be performed only during the periods March 1 to July 1 and August 1 to December 1.

COVERCROP SEEDING (8-6-1217)

Paragraph 3. of Subsection 802.02 in the Standard Specifications is void and superseded by the following:

Fertilizer is not required for covercrop seeding.

Paragraph 6. of Subsection 802.03 is void.

GEOTEXTILE FABRIC

Description

1. This work shall consist of furnishing and installing a geotextile fabric at the locations shown in the plans and as directed by the Engineer.

Material Requirements

1. The geotextile fabric shall be a Class II woven or non-woven geotextile selected from the Approved Products List.

Construction Methods

1. The surface underlying the geotextile fabric shall be prepared to a relatively smooth condition free of obstructions, depressions, and debris.
2. The geotextile shall be placed on the underlying surface such that the geotextile fabric is not damaged. The fabric shall be placed so the the upstream strip of fabric will overlap the downstream strip. Material overlap for unstitched seams shall be a minimum of 24 inches. The geotextile shall be laid smooth so as to minimize tension, stress, folds, wrinkles, and creases.
3. The geotextile shall be held in place by adequate pinning, selectively placed embankment, or a combination of pinning and selective placement of embankment prior to placement of the specified embankment.

Method of Measurement

1. The item "Geotextile Fabric" shall be measured by the square yard of the area covered by the fabric and accepted by the Engineer with no allowance for overlaps.

Basis of Payment

- | | | |
|----|--|------------------|
| 1. | Pay Item | Pay Unit |
| | Geotextile Fabric | Square Yard (SY) |
| 2. | Payment is full compensation for all work described in this Section. | |

**PORTLAND CEMENT
(10-8-1118)**

Paragraph 1. of Subsection 1004.04 is void and superseded by the following:

1. Portland and Interground/Blended cements shall be on the Nebraska Qualified Material Vendors List (NQMVL).

The reference to “the APL” in Paragraph 2. of Subsection 1004.04 is revised to “the NQMVL”.

Paragraph 2.a.(9) of Subsection 1004.04 is void and superseded by the following:

- (9) Report test results per ASTM C 1567 at 28 days and/or AASHTO T 380 at 56 days.

Paragraph 3. of Subsection 1004.04 is void and superseded by the following:

3. Alkali Silica Reaction Requirements and Testing:
 - a. Interground/Blended cement shall be tested according to the provisions of ASTM C 1567.
 - (1) The mortar bars shall be composed of Type IP, IS or IT Interground/blended cement and sand/gravel from an approved Platte River Valley (Saunders County) and/or Elkhorn River (Madison County) aggregate source.
 - (2) The mortar bars for the ASTM C 1567 shall not exceed 0.10% expansion at 28 days.
 - i. If the expansion is greater than 0.10% at 28 days, then the Interground/Blended cement shall be tested in accordance with AASHTO T 380 using sand/gravel from an approved Platte River Valley (Saunders County) and/or Elkhorn River (Madison County) aggregate source with an expansion not greater than 0.03% at 56 days.

Paragraph 2. of Subsection 1004.05 is void and superseded by the following:

2. Noncompliant material shall be tested in accordance with ASTM C 1567 and in accordance with Subsection 1004.04, Paragraph 3.a.(1).
 - a. The mortar bars for the ASTM C 1567 shall not exceed 0.10% expansion at 28 days.
 - b. If the expansion for ASTM C 1567 is greater than 0.10% at 28 days, then the Interground/Blended cement shall be tested in accordance with AASHTO T 380 using the most reactive aggregate from the project with an expansion not greater than 0.03% at 56 days.

- c. If the expansion for ASTM C 1567 is greater than 0.10% at 28 days or if the expansion for the AASHTO T 380 is greater than 0.03% at 56 days, then the Interground/Blended cement shall be subject to removal, 40% pay, and/or removal from NDOT's NQMVL in accordance with NDOT's Acceptance Policy on Portland and Interground/Blended Cements.

BITUMINOUS LIQUID COMPOUNDS FOR CURING CONCRETE (10-8-1217)

Subsection 1013.02 in the Standard Specifications is amended to include the following:

- 2. The Contractor has the option of using bituminous tack coat. The tack coat shall conform to all requirements of Section 504.

AGGREGATES (10-8-1118)

Paragraph 2. of Subsection 1033.02 in the Standard Specifications is amended to include the following:

- g. All Portland cement concrete aggregates - regardless of their source - will be sampled and tested by the Engineer for their potential alkali reactivity in accordance to ASTM C 1260. This testing is a part of the materials source and quarries approval process.
 - (1) The expansion shall not be greater than 0.57% at 28 days.
 - (2) If the expansion is greater than 0.57%, the aggregate shall not be used.

Paragraph 3.a.(8) of Subsection 1033.02 is void and superseded by the following:

- (8) Lightweight pieces (measured by percent volume values) shall not exceed 0.5%. For Class R aggregate, fine aggregate is defined as any material passing a No. 4 sieve.

Paragraph 3.b.(2) of Subsection 1033.02 is void and superseded by the following:

- (2) The percent of clay lumps, shale, or soft particles shall not exceed the following amounts:

Clay Lumps.....	0.5%
Shale	1.0%
Soft Particles.....	3.5%
Lightweight Pieces.....	0.5%

Paragraph 3.b.(8) of Subsection 1033.02 is void.

PREFORMED JOINT FILLER (10-13-0818)

Section 1015 in the Standard Specifications is void and superseded by the following:

1015.01 – Description

1. Preformed expansion joint filler shall be furnished in strips of the dimensions specified in the contract.

1015.02 – Material Characteristics

1. Nonextruding and Resilient Bituminous Type (Fiber Type) performed joint filler shall conform to the requirements of AASHTO M 213.
2. Bituminous Type (Asphalt Type) preformed joint filler shall conform to the requirements of AASHTO M 33 except it will not be subject to a requirement for brittleness.
3. Preformed joint filler (Sponge Rubber Type) shall be a flexible cellular rubber product meeting the classification requirements of the latest edition of ASTM D1056 for Type 2, Class A or B, Grade 2 or 3, except that reclaimed rubber shall not be used in the manufacture of the material. The color shall be gray.
4. Semi-Rigid, Closed-Cell Polypropylene Foam Type (Polypropylene Type) preformed expansion joint filler shall conform to the requirements of ASTM D8139.

1015.03 – Procedures

1. For structures, the Bituminous Type (Asphalt Type) or Preformed Joint filler (Sponge Rubber Type) shall be used, unless otherwise shown in the contract.
2. Except for structures, the Non-extruding and Resilient Bituminous Type (Fiber Type) or the Semi-Rigid Closed-Cell Polypropylene Foam Type (Polypropylene Type) shall be used, unless otherwise shown in the contract.

1015.04 – Acceptance Requirements

1. Preformed joint fillers that are on the Department's Approved Products List are acceptable.
2. The preformed joint fillers may be accepted based on manufacturer's certification of compliance letters when they are not on the Department's Approved Products List.

JOINT AND CRACK SEALING FILLER

Paragraph 1.a. of Subsection 1014.02 is void and superseded by the following:

- a. NE-3405 joint and crack sealer shall conform to the requirements of ASTM D6690, Type II. The material shall conform to the requirements of Table 1 with the following exceptions:

Table 1014.01 of Subsection 1014.02 is void and superseded by the following:

Table 1014.01

Silicone Joint Sealer Requirements		
Property	Requirement	Test
As supplied:		
Specific Gravity	1.010 - 1.515	ASTM D792
Work Time, minimum	10 minutes	
Tack-Free Time, at 77°F (25°C)	20 - 310 minutes	ASTM C679
Full Adhesion, maximum	21 days, 4 hours	
Cyclic Joint Movement Capacity	+100% to -50%	ASTM C719
Durometer Hardness:		
Non-Sag, Shore A	10 - 25	ASTM D2240
Self-Leveling, Shore 00, minimum	40	ASTM D2240
As cured, by standard laboratory conditions:		
Ultimate Elongation, Method A, Die C, min.	600%	ASTM D412
Cure Evaluation, full cure, maximum	21 days, 4 hours	ASTM D5893
Non-immersed Bond	Pass 5 cycles	ASTM D5893
Water-immersed Bond	Pass 5 cycles	ASTM D5893
Tensile Stress, at 150% Elongation, max.	45 psi	ASTM D412

Paragraph 1.a.(2). of Subsection 1014.04 is void and superseded by the following:

- (2) Off-site (Proxy) sampling shall be in accordance with ASTM D5078.

PROPOSAL GUARANTY (1-37-1217)

As an evidence of good faith in submitting a bid for this work, the bidder shall indicate the type of bid bond applied to this project in accordance with Subsection 102.14 of the Standard Specifications.

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